Seismic Retrofit Project

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

NOTICE TO CONTRACTORS

AND

SPECIAL PROVISIONS

FOR CONSTRUCTION ON

STATE HIGHWAY

IN

CONTRA COSTA AND SOLANO COUNTIES IN BENICIA AND MARTINEZ FROM 0.6 MILE NORTH OF MOCOCO OVERHEAD TO 0.1 MILE NORTH OF BENICIA-MARTINEZ BRIDGE AND OVERHEAD TOLL PLAZA

DISTRICT 04, ROUTES 680,780

For use in Connection with Standard Specifications **DATED JULY, 1992,** Standard Plans **DATED JULY, 1992,** and Labor Surcharge And Equipment Rental Rates.

CONTRACT NO. 04-044024

(INFORMAL BIDS CONTRACT)

04-CC,Sol-680,780-Var

Bids Open: ~~**March 24, 1998**~~ **August 25, 1998**

Dated: September 29, 1997

OSD

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY PETE WILSON, Governor
DEPARTMENT OF TRANSPORTATION
ESC/OE MS #43
P.O. Box 942874
SACRAMENTO, CA 94274-0001

TDD (916) 654-4014

July 31, 1998

04-CC,Sol-680,780-Var
04-044024

Addendum No. 7

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in CONTRA COSTA AND SOLANO COUNTIES IN BENICIA AND MARTINEZ FROM 0.6 MILE NORTH OF MOCOCO OVERHEAD TO 0.1 MILE NORTH OF BENICIA-MARTINEZ BRIDGE AND OVERHEAD TOLL PLAZA.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on August 25, 1998. The bid opening was previously postponed indefinitely under Addendum No. 5 dated March 11, 1998.

This addendum is being issued to set a new bid opening date as shown herein and revise the Notice to Contractors and Special Provisions, and the Engineer's Estimate.

Project Plan Sheets 21 through 36, 38 through 41, 53, 61, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 119, and 121 are revised. Half-sized copies of the revised sheets are attached for substitution for the like numbered sheets.

Project Plan Sheet 117A is added. A half-sized copy of the added sheet is attached for addition to the project plans.

In the Special Provisions, Section 4, "BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES," the number of working days is revised to 380.

In the Special Provisions, Section 5-1.18, "PAYMENTS", the item, "Electronic Mobile Daily Diary Computer System $70, 000," is deleted from the second paragraph.

In the Special Provisions, Section 5-1.18, "PAYMENTS", the following paragraph is added as the last paragraph:

"Plate steel and structural steel, stored within the State of California, and fabricated elements for structural steel, fabricated and stored within the United States, will be eligible for partial payment if the Contractor furnishes evidence satisfactory to the Engineer that its storage is subject to or under the control of the Department and that it has been designated or fabricated specifically for this project."

In the Special Provisions, Section 5-1.29, "ACCESS TO JOBSITE," the second paragraph (refer to Addendum No. 3) is revised to read as follows:

"Access to all construction activities on the south side of the Carquinez Strait near Pier 13 shall be from the water (barge) or may be along and upon the existing private roadway belonging to TOSCO Corporation, leading from Marina Vista Road to and from the waterfront area."

In the Special Provisions, Section 5-1.30, "DRAWINGS," is revised as attached.

In the Special Provisions, Section 5-1.35, "COST REDUCTION INCENTIVE," is revised as attached.

In the Special Provisions, Section 5-1.36, "ESCROW OF BID DOCUMENTATION," is revised as attached.

In the Special Provisions, Section 8-3. “WELDING," the following section is added:

"8-3.00 WELDING ELECTRODES

Flux core welding electrodes conforming to the requirements of AWS A5.20 E6XT 4 or E7XT 4 shall not be used to perform any type of welding for this project."

In the Special Provisions, Section 10-1.01 (refer to Addendum No. 3), "ORDER OF WORK," the sixth paragraph is deleted.

In the Special Provisions, Section 10-1.04, "ELECTRONIC MOBILE DAILY DIARY COMPUTER SYSTEM," is deleted.

In the Special Provisions, Section 10-1.05, "ELECTRONIC MOBILE DAILY DIARY SYSTEM DATA DELIVERY," is revised as attached.

In the Special Provisions, Section 10-1.08, "PROGRESS SCHEDULE (CRITICAL PATH)," is revised as attached.

In the Special Provisions, Section 10-1.13, "MAINTAINING TRAFFIC," is revised as attached.

In the Special Provisions, Section 10-1.20E, "TEMPORARY DECK BRIDGING," in sub-section, "TEMPORARY DECK BRIDGING CONSTRUCTION," the third paragraph is revised as follows:

"The temporary deck surface shall not deviate more than 1/4 inch vertically or 1/2 inch horizontally from the existing adjacent deck surface, except at Abutment 1. At excavations for work at Abutment 1, the vertical offset between the plane of the existing roadway surface and the top surface of the temporary deck bridging shall not exceed 1 1/2 inches. If said offset exceeds 3/4 inch, temporary conforms of asphalt concrete, or other approved material, with a maximum top surface slope of 8:1 shall be in place and maintained at all edges whenever the temporary deck bridging is open to traffic. Such conforms shall be removed when temporary deck bridging is removed for the last time at each location."

In the Special Provisions, Section 10-1.22, "EARTHWORK," the following paragraph is added after the second paragraph:

"Attention is directed to the need for temporary shoring to protect existing facilities during performance of work at Abutment 1. Such temporary shoring shall conform to the requirements of Section 7-1.09, “Public Safety,” and Section 19-1.02, “Preservation of Property,” of the Standard Specifications. The Contractor shall submit to the Engineer for approval, working drawings for the temporary shoring. In addition to the requirements in Sections 5-1.02, “Plans and Working Drawings,” and 5-1.02A, “Trench Excavation Safety Plans,” temporary shoring working drawings shall show the installation and removal sequence for the temporary shoring, and details for providing continuity of any reinforcing steel which is interfered with by the shoring. Also, such working drawings shall be reviewed for adequacy of protection provided for highway facilities and traffic. These working drawings shall be prepared by an engineer who is registered as a Civil Engineer in the State of California."

In the Special Provisions, Section 10-1.24, "PILING," in the section, "Materials" under sub-section, "CAST-IN PLACE CONCRETE PILING," the second subparagraph of the seventh paragraph on page 85 is revised to read:

"Cast-in-place concrete piles 24 inches in diameter or larger shall be constructed so that the excavation methods and the concrete placement procedures shall provide for placing the concrete against undisturbed material, except as provided at Abutment 1, in a dry or dewatered hole or may be constructed by excavation and depositing concrete under slurry."

In the Special Provisions, Section 10-1.24, "PILING," in the section, "Construction" under sub-section, "CAST-IN PLACE CONCRETE PILING," the first sentence of the fifth sub-paragraph of the tenth paragraph on page 87 is revised to read:

"Temporary steel casings shall be furnished and placed tight in the hole where specified and where necessary to control water or to prevent quick soil conditions or caving of the hole."

In the Special Provisions, Section 10-1.24, "PILING," in the section, "Construction" under sub-section, "CAST-IN PLACE CONCRETE PILING," the third and fourth sentences of the fifth sub-paragraph of the tenth paragraph on page 87 are replaced with the following:

"Except as specified herein for piles at Abutment 1, the casing shall be non-corrugated and the surfaces shall be smooth, clean and free from hardened concrete, and the casing shall be removed while the concrete is being placed."

In the Special Provisions, Section 10-1.24, "PILING," in the section, "Construction" under sub-section, "CAST-IN PLACE CONCRETE PILING," the following sub-paragraph is added after the fifth sub-paragraph of the tenth paragraph on page 87 as follows:

"For piles at Abutment 1, temporary steel casings shall be installed to a minimum depth of 20 feet below the pile cut-off elevation. Such depth shall be increased as necessary to control conditions described elsewhere in these special provisions. Such temporary steel casings shall be installed concurrently with excavation and shall be in place before opening any lane of traffic which was closed for pile construction. At the Contractor's option, the upper 20-foot portion of such casings may be left in place. Corrugated casing material may be used only for portions of casings to be left in place. Grout shall be injected around the outside of the casing, for the full depth of casing left in place, to fill all voids between the casing and the foundation material. The grout shall be a flowable mix containing not less than 900 pounds of cementitious material per cubic yard, of which at least 600 pounds per cubic yard shall be portland cement. Grout shall be injected at the low end of the void being filled and shall be expelled at the high end until there is no evidence of entrapped air, water or diluted grout. Before beginning construction of piles where casings will be left in place, the Contractor shall submit a grouting plan to the Engineer for approval. The grouting plan shall include the following:

1. The design of the grout mix, including a complete description of any admixtures to be used.
2. A description of the equipment, methods, and grout pressures to be used.
3. Dimensions and details of the casings to be left in place."

In the Special Provisions, Section 10-1.24, "PILING," sub-section, "MEASUREMENT AND PAYMENT," the following paragraph is added after the third paragraph:

"Full compensation for furnishing and installing temporary steel casings, and for grouting temporary casings when required, shall be considered as included in the contract price paid per linear foot for cast-in-drilled-hole concrete piling, and no additional compensation will be allowed therefor."

In the Special Provisions, Section 10-1.38, "STEEL STRUCTURES," is revised as attached.

In the "Copy of Engineer's Estimate" in the NOTICE TO CONTRACTORS and the "Engineer's Estimate" in the PROPOSAL, Items 6, 7, 12, 14, 56, 58 and 59 are revised; and Items 13, 57 and 63 are deleted as attached.

To Proposal and Contract book holders:

- REPLACE PAGES 3, 5 AND 6 OF THE ENGINEER'S ESTIMATE IN THE PROPOSAL WITH THE ATTACHED REVISED PAGES 3, 5 AND 6 OF THE ENGINEER'S ESTIMATE. THE REVISED ENGINEER'S ESTIMATE IS TO BE USED IN THE BID SUBMITTAL AND INSERTED IN THE PROPOSAL.
- A COPY OF THE "TEMPORARY ACCESS AGREEMENT" BETWEEN TOSCO AND CALTRANS IS ATTACHED AS A MATERIAL HANDOUT.
- INDICATE RECEIPT OF THIS ADDENDUM BY FILLING IN THE NUMBER OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE SIGNATURE PAGE OF THE PROPOSAL.
- Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

- Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

NICK YAMBAO, Chief
Plans, Specifications &
Estimates Branch
Office of Office Engineer

Attachments

5-1.30 DRAWINGS

Attention is directed to Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications and these special provisions.

When working drawings are required by these special provisions, the drawings shall be submitted in accordance with the provisions in Section 55-1.02, "Drawings," of the Standard Specifications and the following:

1. Working drawings shall be submitted to the Engineer.
2. Working drawings shall not exceed 22" x 34" in size.
3. Microfilms are required of all approved shop drawings and shall be only a 24x reduction.

At the completion of the contract, one set of all approved final working drawings in electronic form, including any revisions required after approval, shall be furnished to the Engineer.

Electronic files of working drawings shall be Microstation Version 5.0 or a more current design file format and shall be submitted on compact disk media.

An index prepared specifically for the working drawings for each portion of the work which requires working drawings, containing sheet numbers and titles shall be included on the compact disk media. Electronic files for working drawings shall be arranged in the order of drawing numbers shown in the index.

5-1.35 COST REDUCTION INCENTIVE

Section 5-1.14, "Cost Reduction Incentive," of the Standard Specifications is amended by adding the following paragraph:

Prior to preparing a cost reduction proposal, the Contractor shall request a meeting with the Engineer to discuss the proposal in concept and determine whether the cost reduction proposal will be considered by the Department. Items of discussion will also include permit issues, impact on other projects, impact on the project schedule, traffic considerations, safety and health issues, design criteria, and review times required by the Department and other agencies. Determination by the Engineer that a cost reduction proposal will not be considered further will be deemed rejection of the proposal.

5-1.36 ESCROW OF BID DOCUMENTATION

Bid documentation shall consist of all documentary and calculated information generated by the Contractor in preparation of the bid. The bid documentation shall conform to the requirements in these special provisions, and shall be submitted to the Department and held in escrow for the duration of the contract.

In the resolution of disputes involving the project, the escrowed bid documents will be the only documents accepted from the Contractor regarding preparation of the bid.

In signing the proposal, the bidder certifies that the material submitted for escrow constitutes all the documentary information used in preparation of the bid and that he has personally examined the contents of the container and that they are complete.

The bidder shall include with the proposal, the identification of the bidder's representative authorized to present the bid documentation and the persons responsible for preparing the bidder's estimate.

Nothing in the bid documentation shall be construed to change or modify the terms or conditions of the contract.

Escrowed bid documentation will not be used for pre-award evaluation of the Contractor's anticipated methods of construction, nor to assess the Contractor's qualifications for performing the work.

Bid documentation shall clearly itemize the Contractor's estimated costs of performing the work. The documentation submitted shall be complete and so detailed as to allow for an in-depth analysis of the Contractor's estimate.

The bid documentation shall include, but not be limited to: quantity takeoffs; rate schedules for the direct costs and the time- and nontime-related indirect costs for labor (by craft), plant and equipment ownership and operation, permanent and expendable materials, insurance and subcontracted work; estimated construction schedules, including sequence and duration and development of production rates; quotations from subcontractors and suppliers; estimates of field and home office overhead; contingency and margin for each contract item of work; and other reports, calculations and information used by the bidder to arrive at the estimate submitted with the proposal.

The Contractor shall also submit bid documentation for each subcontractor whose total subcontract exceeds $250,000. Subcontractor bid documentation shall be enclosed with the Contractor's submittal. The examination of subcontractors' bid documentation will be accomplished in the same manner as for the Contractor's bid documentation. If a subcontractor is replaced, bid documentation for the new subcontractor shall be submitted for review and escrow before authorization for the substitution will be granted. Upon request of a subcontractor, the bid documentation from that subcontractor shall be reviewed only by the subcontractor and the Department.

If the bidder is a joint venture, the bid documentation shall include the joint venture agreement, the joint venture estimate comparison and final reconciliation of the joint venture estimate.

Copies of the proposals submitted by the first, second and third low bidders will be provided to the respective bidders for inclusion in the bid documentation to be escrowed.

The first, second, and third apparent low bidders shall present the bid documentation for escrow at the District 04 Office, 111 Grand Avenue, Room 12-816, Oakland, CA, on the first Monday, at 1:00 p.m., following the time indicated in the "Notice to Contractors" for the opening of bids.

Bid documentation shall be submitted in a sealed container, clearly marked with the bidder's name, date of submittal, project contract number and the words, "Bid Documentation for Escrow."

Failure to submit the actual and complete bid documentation as specified herein within the time specified shall be cause for rejection of the proposal.

Upon submittal, the bid documentation of the apparent low bidder will be examined and inventoried by the duly designated representatives of the Contractor and the Department to ensure that the bid documentation is authentic, legible, and in accordance with the terms of this section "Escrow of Bid Documentation." The examination will not include review of, nor will it constitute approval of, proposed construction methods, estimating assumptions or interpretation of the contract. The examination will not alter any conditions or terms of the contract. The acceptance or rejection by the Department that the submitted bid documents are in compliance with this section "Escrow of Bid Documentation" shall be completed within 48 hours of the time the bid documentation is submitted by the Contractor.

At the completion of the examination, the bid documents will be sealed and jointly deposited at an agreed commercial bank.

Bid documentation submitted by the second and third apparent low bidders will be jointly deposited at agreed commercial banks. If the apparent low bid is withdrawn or rejected, the bid documentation of the second low bidder will be examined and inventoried in the manner specified above, then sealed and deposited again in escrow. If the second low bid is withdrawn or rejected, the bid documentation of the third low bidder will be examined and inventoried in the manner specified above, then sealed and deposited again in escrow. Upon execution and final approval of the contract or rejection of all bids, the bid documentation will be returned to any remaining unsuccessful bidders.

REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

The escrowed bid documentation may be examined by the designated representatives of both the Department and the Contractor, at any time deemed necessary by either the Department or the Contractor to assist in the negotiation of price adjustments and change orders, or in the settlement of claims or disputes.

If requested by a Disputes Review Board, the escrowed bid documentation may be utilized to assist the Board in its recommendations.

The bid documentation submitted by the Contractor will be held in escrow until the contract has been completed, the ultimate resolution of all disputes and claims has been achieved and receipt of final payment has been accepted by the Contractor. The escrowed bid documentation will then be released from escrow to the Contractor.

The bid documentation submitted by the bidder is, and shall remain, the property of the bidder, and is subject to only joint review by the Department and the bidder. The Department stipulates and expressly acknowledges that the submitted bid documentation constitutes trade secrets and will not be deemed public records. This acknowledgment is based on the Department's express understanding that the information contained in the bid documentation is not known outside the bidder's business, is known only to a limited extent and only by a limited number of employees of the bidder, is safeguarded while in the bidder's possession, is extremely valuable to the bidder and could be extremely valuable to the bidder's competitors by virtue of it reflecting the bidder's contemplated techniques of construction. The Department acknowledges that the bid documentation includes a compilation of information used in the bidder's business, intended to give the bidder an opportunity to obtain an advantage over competitors who do not know of or use the contents of the documentation. The Department agrees to safeguard the bid documentation, and all information contained therein, against disclosure, including disclosure of subcontractor bid documentation to the Contractor and other subcontractors to the fullest extent permitted by law. However, in the event of arbitration or litigation, the bid documentation shall be subject to discovery, and the Department assumes no responsibility for safeguarding the bid documentation unless the Contractor has obtained an appropriate protective order issued by the arbitrator or the court.

Full compensation for preparing the bid documentation, presenting it for escrow and reviewing it for escrow and upon request of the Engineer shall be considered as included in the contract prices paid for the various items of work, and no additional compensation will be allowed therefor.

The direct cost of depositing the bid documentation in escrow at the agreed commercial bank will be paid by the State.

CONTRACT NO. 04-044024
REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

10-1.05 ELECTRONIC MOBILE DAILY DIARY SYSTEM DATA DELIVERY

Attention is directed to Sections 5-1.10, "Equipment and Plants," and 7-1.01A(3), "Payroll Records," of the Standard Specifications, and these special provisions.

The Contractor shall submit to the Engineer a list of each piece of equipment and its identifying number, type, make, model and rate code in accordance with the Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rate" which is in effect on the date upon the work is performed, and the names, labor rates and work classifications for all field personnel employed by the Contractor and all subcontractors in connection with the public work, together with such additional information as is identified below. This information shall be updated and submitted to the Engineer weekly through the life of the project.

This personnel information will only be used with a State mobile daily diary computer system and it will not relieve the Contractor and subcontractors from all the payroll records requirements as required by Section 7-1.01A(3), "Payroll Records," of the Standard Specifications.

The Contractor shall provide the personnel and equipment information not later than 11 days after the contract award for its own personnel and equipment, and not later than 5 days before start of work by any subcontractor for the labor and equipment data of that subcontractor.

The minimum data to be furnished shall comply with the following specifications:

Data Content Requirements.--

1. The Contractor shall provide the following basic information for itself and for each subcontractor that will be used on the contract:

Company name.	Alphanumeric; up to 30 characters.
Company type (prime or sub)	Alphanumeric; up to 10 characters.
Address (line 1).	Alphanumeric; up to 30 characters.
Address (line 2).	Alphanumeric; up to 30 characters.
Address (city).	Alphanumeric; up to 30 chars.
Address (2-letter state code).	Alphanumeric; up to 2 characters.
Address (zip code)	Alphanumeric; up to 14 characters.
Contact name.	Alphanumeric; up to 30 characters
Telephone number (with area code).	Alphanumeric; up to 20 characters.
Company code: short company name.	Alphanumeric; up to 10 characters.
Type of work (Department-supplied codes)	Alphanumeric; up to 30 characters
DBE status (Department-supplied codes)	Alphanumeric; up to 20 characters.
Ethnicity for DBE status (Department-supplied codes).	Alphanumeric; up to 20 characters.
List of laborers to be used on this contract (detail specified below).	
List of equipment to be used on this contract (detail specified below).	

For example, one such set of information for a company might be:

XYZ CONSTRUCTION, INC.
1240 9TH STREET
SUITE 600
OAKLAND
CA
94612
JOHN SMITH
(510) 834-9999
XYZ
PAVING
MBE
BLACK

2. The Contractor shall provide the following information for each laborer who will be used on the contract:

Company code (as defined above).	Alphanumeric; up to 10 characters.
Employee ID	Alphanumeric; up to 10 characters
Last name.	Alphanumeric; up to 20 characters.
First name.	Alphanumeric; up to 15 characters.
Middle initial.	Alphanumeric; up to 1 characters.
Labor classification (Department-provided codes).	Alphanumeric; up to 10 characters.
Hourly rate.	Alphanumeric; up to (6,2)
Trainee status (Y/N).	Alphanumeric; up to 1 characters
Ethnicity (Department-provided codes).	Alphanumeric; up to 20 characters.
Gender.	Alphanumeric; up to 1 characters.

For example, one such set of information might be:

XYZ
1249
GONZALEZ
HECTOR
V
OPR
22.75
N
HISPANIC
M

3. The Contractor shall provide the following information for each piece of equipment that will be used on the contract:

Company code (as defined above).	Alphanumeric; up to 10 characters.
Company's equipment ID number.	Alphanumeric; up to 10 characters.
Company's equipment description.	Alphanumeric; up to 60 characters.
Equipment type (from Department ratebook).	Alphanumeric; up to 60 characters.
Equipment make (from Department ratebook).	Alphanumeric; up to 60 characters.
Equipment model (from Department ratebook).	Alphanumeric; up to 60 characters.
Equipment rate code (from Department ratebook).	Alphanumeric; up to 10 characters
Hourly rate.	Alphanumeric; up to (6,2)
Rental flag.	Alphanumeric; up to 1 character

For example, one such set of information might be:

XYZ
B043
CAT TRACTOR D-6C
TRACC
CAT
D-6C
3645
28.08
N

Data Delivery Requirements.--

1. All data described in "Data Requirements" of this section shall be delivered to the Department electronically, on 3 1/2" floppy disks compatible with the Microsoft Windows operating system. The Contractor shall provide a weekly disk and hard copy of the required correct updated personnel and equipment information for the Contractor and all the subcontractors and verified correct by the Engineer.
2. Data of each type of described in the previous section (Contractor, labor, and equipment information) will be delivered separately, each type in one or more files on floppy disk. Any given file may contain information from one contractor or from multiple contractors, but only one type of data (contractor, labor, or equipment information).
3. The file format for all files delivered to the Department shall be standard comma-delimited, plain text files. This type of file (often called “CSV”) is the most standard type for interchange of formatted data; it can be created and read by all desktop spreadsheet and desktop database applications. Characteristics of this type of file are:

    - All data is in the form of plain ASCII characters.
    - Each row of data (company, person, equipment) is delimited by a carriage return character.
    - Within rows, each column (field) of data is delimited by a comma character.

REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

4. The files shall have the following columns (i.e., each row shall have the following fields):

    - Contractor info: 11 columns (fields) as specified in "Data Requirements #1", above.
    - Labor info: 9 columns (fields) as specified in "Data Requirements #2", above.
    - Equipment info: 8 columns (fields) as specified in "Data Requirements #3", above.

    For each type of file, columns (fields) must be in the order specified under "Data Requirements", above. All columns (fields) described under "Data Requirements" must be present for all rows, even if some column (field) values are empty. The first row of each file may contain column headers (in plain text) rather than data, if desired.

5. Column (field) contents must conform to the data type and length requirements described in the "Data Requirement" section, above. In addition, column (field) data must conform to the following restrictions:

    - All data shall be uppercase.
    - Company type shall be either “PRIME” or “SUB”.
    - Labor classification codes must conform to a list of standard codes that will be supplied by Department.
    - Contractor type of work codes and DBE status codes must conform to a list of standard codes that will be supplied by Department.
    - Ethnicity codes must conform to standard codes that will be supplied by Department.
    - Data in the "trainee status" column must be either "Y" or "N".
    - Data in the "gender" column must be either "M" or "F".
    - Data in the "rental equipment" column must be either "Y" or "N".
    - Equipment owner's description may not be omitted. (The description, together with the equipment number, is how the equipment will be identified in the field.)
    - Equipment type, make, model, and ratebook code shall conform to the Department of Transportation Publication entitled “Labor Surcharge and Equipment Rental Rate”, which is in effect on the date upon the work is performed. If the equipment in question does not have an entry in the book then alternate, descriptive entries may be made in these fields.

6. The name of each file must indicate its contents, e.g., "XYZlab.txt" for laborers from XYZ Company, Inc. Each floppy disk supplied to the Department must be accompanied by a printed list of the files it contains with a brief description of the contents of each file.

PAYMENT.-- Payment for providing electronic mobile daily diary computer system data delivery will be made on a lump sum basis .The lump sum bid price for electronic mobile daily diary computer system data delivery will be made according to the following schedule:

The Contractor will receive not more than 5 per cent per month of the total bid price for electronic mobile daily diary computer system data delivery .

After the completion of the work, 100 per cent payment will be made for electronic mobile daily diary computer system data delivery less the permanent deduction, if any, for failure to deliver complete weekly electronic mobile daily diary computer system data in each month.

The contract lump sum price paid for electronic mobile daily diary computer system data delivery shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in electronic mobile daily diary computer system data delivery as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

In the event the Contractor fails to deliver complete weekly electronic mobile daily diary computer system data in each month , the Department will retain 5 per cent of the total bid price for electronic mobile daily diary computer system data delivery until the data is delivered.

CONTRACT NO. 04-044024
REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

10-1.08 PROGRESS SCHEDULE (CRITICAL PATH)

Progress schedules will be required for this contract. Progress schedules shall utilize the Critical Path Method (CPM).

Definitions - The following definitions apply to this section "Progress Schedule (Critical Path)":

1) Activity: Any task, or portion of a project which takes time to complete.
2) Baseline Schedule: The initial CPM schedule representing the Contractor's original work plan, as accepted by the Engineer.
3) Critical Path Method: A mathematical calculation to determine the longest path of work and relative float represented by a graphic representation of the sequence of activities that shows the interrelationships and interdependencies of the elements composing a project.
4) Current Contract Completion Date: The extended date for completion of the contract shown on the weekly statement of working days furnished by the Engineer in accordance with Section 8-1.06, "Time of Completion," of the Standard Specifications.
5) Early Completion Time: The difference in time between the current contract completion date and the Contractor's scheduled early completion date as shown on the accepted baseline schedule, or schedule updates and revisions.
6) Float: The amount of time between the early start date and the late start date, or the early finish date and the late finish date, of any activity or group of activities in the network.
7) Fragnet: A section or fragment of the network diagram comprised of a group of activities.
8) Free Float: The amount of time an activity can be delayed before affecting a subsequent activity.
9) Hammock Activity: An activity added to the network to span an existing group of activities for summarizing purposes.
10) Milestone: A marker in a network which is typically used to mark a point in time or denote the beginning or end of a sequence of activities. A milestone has zero duration, but will otherwise function in the network as if it were an activity.
11) Revision: A change in the future portion of the schedule that modifies logic, adds or deletes activities, or alters activities, sequences, or duration.
12) Tabular Listing: A report showing schedule activities, their relationships, duration, scheduled and actual dates, and float.
13) Total Float: The amount of time that an activity may be delayed without affecting the total project duration of the critical path.
14) Update: The modification of the CPM progress schedule through a regular review to incorporate actual progress to date by activity, approved time adjustments, and projected completion dates.

Pre-construction Scheduling Conference - The Engineer will schedule and conduct a Pre-construction Scheduling Conference with the Contractor's Project Manager and Construction Scheduler within seven days after the bidder has received the contract for execution. At this meeting, the requirements of this section of the special provisions will be reviewed with the Contractor. The Contractor shall be prepared to discuss its schedule methodology, proposed sequence of operations, and any deviations it proposes to make from the Stage Construction Plans. At this meeting, the Contractor shall submit its proposed work breakdown structure, the associated alpha-numeric coding structure to implement the work breakdown structure and the activity identification system for labeling all work activities. The Engineer shall review and comment on the work breakdown structure, the coding structure and activity identification system within seven days after submission by the Contractor. The Contractor shall make all modifications to the proposed work breakdown structure, the coding structure and activity identification system that are requested by the Engineer, and shall employ that coding, structure and system in its baseline schedule submission.

Interim Baseline Schedule - Within 10 days after approval of the contract, the Contractor shall submit to the Engineer an interim baseline project schedule which will serve as the progress schedule for the first 120 days of the project, or until the baseline schedule is accepted, whichever is sooner. The interim baseline schedule shall utilize the critical path method. The interim baseline schedule shall depict how the Contractor plans to perform the work for the first 120 days of the contract. Additionally, the interim baseline schedule shall show all submittals required early in the project, and shall provide for all permits, and other non-work activities necessary to begin the work. The interim baseline schedule submittal shall include a 3 l/2 inch floppy diskette which contains the data files used to generate the schedule.

The Engineer shall be allowed 15 calendar days to review and accept or reject the interim baseline schedule submitted. Rejected schedules shall be resubmitted to the Engineer within 5 calendar days of receipt by the Contractor of the Engineer's comments, at which time a new 15-calendar day review period by the Engineer will begin.

Baseline Schedule - Within 30 days after approval of the contract, the Contractor shall submit to the Engineer a baseline project schedule. The baseline schedule shall include the activities shown on the interim baseline schedule in the same order and logical relationship as shown in the interim baseline schedule. The baseline project schedule shall have a data date of the day prior to the first working day of the contract and shall not include any completed work to-date. The baseline progress schedule shall meet interim target dates, milestones, stage construction requirements, internal time constraints, show logical sequence of activities, and must not extend beyond the number of days originally provided for in the contract.

The baseline CPM schedule submitted by the Contractor shall have a sufficient number of activities to assure adequate planning of the project and to permit monitoring and evaluation of progress and the analysis of time impacts. The baseline schedule shall depict how the Contractor plans to complete the whole work involved, and shall show all activities that define the critical path.

The baseline progress schedule shall be supplemented with resource allocations for every activity, to a level of detail that facilitates report generation based on labor craft and equipment class for the Contractor and subcontractors. The Contractor shall use average composite crews to display the labor loading of on-site construction activities. The Contractor shall optimize and level labor to reflect a reasonable plan for accomplishing the work of the contract and to assure that resources are not duplicated in concurrent activities. The Contractor shall require each subcontractor to submit in writing a statement certifying that the subcontractor has concurred with the Contractor's CPM, including major updates, and that the subcontractor's related schedule has been incorporated accurately, including the duration of activities and labor and equipment loading. Along with the baseline progress schedule, the Contractor shall also submit to the Engineer time-scaled resource histograms of the labor crafts and equipment classes to be utilized on the contract. The baseline schedule submittal shall include a 3 l/2 inch floppy diskette which contains the data files used to generate the schedule.

The Engineer shall be allowed 15 calendar days to review and accept or reject the baseline project schedule submitted. Rejected schedules shall be resubmitted to the Engineer within 5 calendar days, at which time a new 15-calendar day review period by the Engineer will begin.

Project Schedule Reports - Schedules submitted to the Engineer including baseline and interim baseline schedules shall include time scaled network diagrams. Network diagrams shall be based on early start and early finish dates of activities shown. The network diagrams submitted to the Engineer shall also be accompanied by the computer-generated mathematical analysis tabular reports for each activity included in the project schedule. Three different report sorts shall be provided: Early Start, Free Float, Total Float, and Activity Number, which shall show all predecessors and successors for each activity. The mathematical analysis tabular reports (8 1/2" x 11" size) shall be submitted to the Engineer and shall include, at a minimum, the following for each activity:

1) Data date
2) Predecessor and successor activity numbers and descriptions;
3) Activity number and description;
4) Activity codes;
5) Schedule, and actual and remaining duration for each activity;
6) Earliest start date (by calendar date);
7) Earliest finish date (by calendar date);
8) Actual start date (by calendar date);
9) Actual finish date (by calendar date);
10) Latest start date (by calendar date);
11) Latest finish date (by calendar date);
12) Identify actual non-working days
13) Identify activity calendar type
14) Total Float and Free Float, in work days;
15) Percentage of activity complete and remaining duration for incomplete activities; and
16) Imposed constraints.

Networks shall be drafted time scaled to show a continuous flow of information from left to right. The primary paths of criticality shall be clearly and graphically identified on the networks. The network diagram shall be prepared on E-size sheets (36" x 48"), shall have a title block in the lower right-hand corner, and a timeline on each page. Exceptions to the size of the network sheets and the use of computer graphics to generate the networks shall be subject to the approval of the Engineer.

Schedule network diagrams and computer tabulations shall be submitted to the Engineer for acceptance in the following quantities:

a) 2 sets of the Network Diagrams;
b) 2 copies of the computer tabulation reports (8 1/2" x 11" size); and
c) 3 computer diskettes.

Should the baseline schedule or schedule update, submitted for acceptance, show variances from the requirements of the contract, the Contractor shall make specific mention of the variations in the letter of transmittal, in order that, if accepted, proper adjustments to the project schedule can be made. The Contractor will not be relieved of the responsibility for executing the work in strict accordance with the requirements of the contract documents. In the event of a conflict between the requirements of the contract documents and the information provided or shown on an accepted schedule, the requirements of the contract documents shall take precedence.

Each schedule submitted to the Engineer shall comply with all limits imposed by the contract, with all specified intermediate milestone and completion dates, and with all constraints, restraints or sequences included in the contract. The degree of detail shall include factors including, but not limited to:

1) Physical breakdown of the project;
2) Contract milestones and completion dates, substantial completion dates, constraints, restraints, sequences of work shown in the contract, the planned substantial completion date, and the final completion date;
3) Type of work to be performed, the sequences, and the major subcontractors involved;
4) All purchase, submittals, submittal reviews, manufacture, tests, deliver, and installation activities for all major materials and equipment.
5) Preparation, submittal and approval of shop and working drawings and material samples, showing time, as specified elsewhere, for the Engineer's review. The same time frame shall be allowed for at least one resubmittal on all major submittals so identified in the contract documents;
6) Identification of interfaces and dependencies with preceding, concurrent and follow-on contractors, railroads, and utilities as shown on the plans or specified in the specifications;
7) Identification of each and every utility relocation and interface as a separate activity, including activity description and responsibility coding that identifies the type of utility and the name of the utility company involved.
8) Actual tests, submission of test reports, and approval of test results;
9) All start-up, testing, training, and assistance required under the Contract;
10) Punchlist and final clean-up;
11) Identification of any manpower, material, or equipment restrictions, as well as any activity requiring unusual shift work, such as double shifts, 6-day weeks, specified overtime, or work at times other than regular days or hours; and
12) Identification of each and every ramp closing and opening event as a separate one-day activity, including designation by activity coding and description that it is a north-bound, south-bound, east-bound, west-bound, and entry or exit ramp activity.

Each construction activity shall have a duration of not more than 20 working days, and not less than one working day unless permitted otherwise by the Engineer. All activities in the schedule, with the exception of the first and last activities, shall have a minimum of one predecessor and a minimum of one successor. The baseline schedule shall not attribute negative float to any activity. Float shall not be considered as time for the exclusive use of or benefit of either the State or the Contractor but shall be considered as a jointly owned, expiring resource available to the project and shall not be used to the financial detriment of either party. Any accepted schedule, revision or update having an early completion date shall show the time between the early completion date and the current Contract Completion Date as "project float".

The Contractor shall be responsible for assuring that all work sequences are logical and the network shows a coordinated plan for complete performance of the work. Failure of the Contractor to include any element of work required for the performance of the contract in the network shall not relieve the Contractor from completing all work within the time limit specified for completion of the contract. If the Contractor fails to define any element of work, activity or logic, and the omission or error is discovered by either the Contractor or the Engineer, it shall be corrected by the Contractor at the next monthly update or revision of the schedule.

Monthly Update Schedules - The Contractor shall submit a Monthly Update Schedule to the Engineer once in each month. The proposed update schedule prepared by the Contractor shall include all information available as of the 20th calendar day of the month, or other date as established by the Engineer. A detailed list of all proposed schedule changes such as logic, duration, lead/lag, additions and deletions shall be submitted with the update.

REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

The monthly update schedule submitted to the Engineer shall be accompanied by a Schedule Narrative Report. The Schedule Narrative Report shall describe the physical progress during the report period, plans for continuing the work during the forthcoming report period, actions planned to correct any negative float predictions, and an explanation of potential delays or problems and their estimated impact on performance, milestone completion dates and the overall project completion date. In addition, alternatives for possible schedule recovery to mitigate any potential delay or cost increases shall be included for consideration by the Engineer. The report shall follow the outline set forth below:

Contractor's Schedule Narrative Report Outline:

1) Contractor's Transmittal Letter
2) Work completed during the period
3) Description of the current critical path
4) Description of problem areas
5) Current and anticipated delays
    a) Cause of the delay
    b) Corrective action and schedule adjustments to correct the delay
    c) Impact of the delay on other activities, milestones, and completion dates
6) Changes in construction sequences
7) Pending items and status thereof
    a) Permits
    b) Change Orders
    c) Time Extensions
    d) Non-Compliance Notices
8) Contract completion date(s) status
    a) Ahead of schedule and number of days
    b) Behind schedule and number of days
9) Include updated Network Diagram and Reports

The Contractor shall provide to the Engineer a 31/2" electronic disk of the schedule, together with printed copies of the network diagrams and tabular reports described under "Project Schedule Reports", and the Schedule Narrative Report.

The monthly update of the schedule shall be for the period from the last update to the current cut-off date, and for the remainder of the project. The current period's activities shall be reported as they actually took place and designated as actually complete, if actually completed, in the schedule updates.

Portions of the network diagram on which all activities are complete need not be reprinted and submitted in subsequent updates. However, the electronic disk file of the submitted schedule and the related reports shall constitute a clear record of progress of the work from award of contract to final completion.

The Contractor will be permitted to show early or late completion on schedule updates and revisions. The Engineer may use the updates and revisions, and other information available, in evaluating the effect of changes, delays, or time savings on the critical path and the accepted schedule current at the time to determine if there is an applicable adjustment of time, if any, to any target date or completion date due to the changes, delays, or time savings.

On a date determined by the Engineer, the Contractor shall meet with the Engineer to review the monthly schedule update. At the monthly progress meeting, the Contractor and the Engineer will review the updated schedule and will discuss the content of the Narrative Report. The Engineer shall be allowed 15 days after the meeting to review and accept or reject the update schedule submitted. Rejected schedules shall be resubmitted to the Engineer within 15 calendar days, at which time a new 15-calendar day review period by the Engineer will begin.

Schedule Revisions - If the Contractor desires to make a change to the accepted schedule, the Contractor shall request permission from the Engineer in writing, stating the reasons for the change, and proposed revisions to activities, logic and duration. The Contractor shall submit for acceptance the affected portions of the project schedule and an analysis to show the effects on the entire project. The Engineer will provide a response within 10 days. No revision to the accepted baseline schedule or the schedule updates shall be made without the prior written approval of the Engineer.

The Engineer will request the Contractor to submit a proposed revised schedule within 15 days when:

a) there is a significant change in the Contractor's operations that will affect the critical path;
b) the current updated schedule indicates that the contract progress is 30 calendar days or more behind the planned schedule, as determined by the Engineer; or
c) the Engineer determines that an approved or anticipated change will impact the critical path, milestone or completion dates, contract progress, or work by other contractors.

CONTRACT NO. 04-044024
REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

The Engineer shall be allowed 15 days to review and accept or reject a schedule revision. Rejected schedule revisions shall be revised and resubmitted to the Engineer within 15 calendar days, at which time a new 15-calendar day review period by the Engineer will begin. Only upon approval of a change by the Engineer shall it be reflected in the next schedule update submitted by the Contractor.

Schedule Time Extension Requests - When the Contractor requests a time extension due to contract change orders or delays, the Contractor shall submit to the Engineer a written Time Impact Analysis illustrating the influence of each change or delay on the current contract completion date or milestone completion date, utilizing the current accepted schedule. Each Time Impact Analysis shall include a fragnet demonstrating how the Contractor proposes to incorporate the Change Order or delay into the current schedule. The fragnet shall include the sequence of new and existing activity revisions that are proposed to be added to the accepted baseline project schedule or current schedule in effect at the time the change or delay is encountered, to demonstrate the influence of the delay and the proposed method for incorporating the delay and its impact into the schedule.

Each Time Impact Analysis shall demonstrate the estimated time impact based on the events of delay, the anticipated or actual date of the contract change order work performance, the status of construction at that point in time, and the event time computation of all activities affected by the change or delay. The event times used in the analysis shall be those included in the latest update of the current schedule in effect at the time the change or delay was encountered.

Time extensions will be granted only to the extent that equitable time adjustments for the activity or activities affected exceed the total or remaining float along the critical path of activities at the time of actual delay, or at the time the contract change order work is performed. Float time is not for the exclusive use or benefit of the Engineer or the Contractor, but is an expiring resource available to all parties as needed to meet contract milestones and the contract completion date. Time extensions will not be granted nor will delay damages be paid unless:

a) the delay is beyond the control and without the fault or negligence of the Contractor and its subcontractors or suppliers, at any tier; and,
b) the delay extends the actual performance of the work beyond the applicable current contract completion date and the most recent date predicted for completion of the project on the accepted schedule update current as of the time of the delay or as of the time of issuance of the contract change order.

Time Impact Analyses shall be submitted in triplicate within 15 days after the delay occurs or after issuance of the contract change order.

Approval or rejection of each Time Impact Analysis by the Engineer will be made within 15 days after receipt of the Time Impact Analysis, unless the review is delayed by subsequent meetings and negotiations. A copy of the Time Impact Analysis approved by the Engineer shall be returned to the Contractor and the accepted schedule revisions illustrating the influence of the contract change orders or delays shall be incorporated into the project schedule during the first update after approval.

Final Schedule Update - Within 15 days after the acceptance of the contract by the Director, the Contractor shall submit a final update of the schedule with actual start and actual finish dates for all activities. This schedule submission shall be accompanied by a certification, signed by an officer of the company and the Contractor's Project Manager stating "To the best of my knowledge, the enclosed final update of the project schedule reflects the actual start and completion dates of the activities contained herein."

Equipment and Software - The Contractor shall provide for the State's exclusive possession and use a complete computer system specifically capable of creating, storing, updating and producing CPM schedules. Before delivery and setup of the computer system, the Contractor shall submit to the Engineer for approval a detailed list of all computer hardware and software the Contractor proposes to furnish. The minimum computer system to be furnished shall include the following:

1) Complete computer system, including keyboard, mouse, 17 inch color SVGA monitor (1,024x768 pixels), Intel Pentium 266MHZ micro processor chip, or equivalent, or better;

2) Computer operating system software, compatible with the selected processing unit, for Windows 95 or later, or equivalent;

3) Minimum sixty-four (64) megabytes of random access memory (RAM);

REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

4) A 3.2 gigabyte minimum hard disk drive, a 1.44 megabyte 3 l/2 inch floppy disk drive, 24x speed minimum CD-ROM drive, ethernet card and 56.6 / 14.4 modem;

5) A color-ink-jet plotter with a minimum 8 megs RAM, capable of 600 dots per inch color, 600 dots per inch monochrome, or equivalent plotter capable of printing fully legible, timescaled charts, and network diagrams, in four colors, with a minimum size of 36 inches by 48 inches (E size) and is compatible with the selected system; and
6) CPM software shall be Primavera Project Planner, version 2.0 for Windows 95, or later.

The computer hardware and software furnished shall be compatible with that used by the Contractor for the production of the CPM progress schedule required by the Contract, and shall include original instruction manuals and other documentation normally provided with the software.

The Contractor shall furnish, install, set up, maintain and repair the computer hardware and software ready for use at a location determined by the Engineer. The hardware and software shall be installed and ready for use by the first submission of the baseline schedule.. The Contractor shall provide 24 hours of formal training for the Engineer in the use of the hardware and software to include schedule analysis, reporting, resource and cost allocations.

All computer hardware and software furnished shall remain the property of the Contractor and shall be removed by the Contractor upon acceptance of the contract when no claims involving contract progress are pending. When claims involving contract progress are pending, computer hardware or software shall not be removed until the final estimate has been submitted to the Contractor.

Payment - Progress schedule (critical path) will be paid for at a lump sum price. The contract lump sum price paid for progress schedule (critical path) shall include full compensation for furnishing all labor, materials (including computer hardware and software), tools, equipment, and incidentals; and for doing all the work involved in preparing, furnishing, updating and revising CPM progress schedules; maintaining and repairing the computer hardware; and training the Engineer in the use of the computer hardware and software; as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payments for progress schedule (critical path) will be made as follows:

Interim baseline schedule accepted, then 10 percent payment for progress schedule (critical path) will be made.

Baseline schedule accepted, then 10 percent payment for progress schedule (critical path) will be made.

Monthly update schedules accepted, then 75 percent payment for progress schedule (critical path) will be made equally for each update.

Final schedule update accepted, then 5 percent payment for progress schedule (critical path) will be made.

The Department will retain an amount equal to 25 percent of the estimated value of the work performed during the first estimate period in which the Contractor fails to submit an interim baseline, baseline, revised or updated CPM schedule conforming to the requirements of this section, as determined by the Engineer. Thereafter, on subsequent successive estimate periods the percentage the Department will retain will be increased at the rate of 25 percent per estimate period in which acceptable CPM progress schedules have not been submitted to the Engineer. Retentions for failure to submit acceptable CPM progress schedules shall be additional to all other retentions provided for in the contract. The retention for failure to submit acceptable CPM progress schedules will be released for payment on the next monthly estimate for partial payment following the date that acceptable CPM progress schedules are submitted to the Engineer.

The adjustment provisions in Section 4-1.03, "Changes," of the Standard Specifications, shall not apply to the item of progress schedule (critical path). Adjustments in compensation for the project schedule will not be made for any increased or decreased work ordered by the Engineer in furnishing project schedules.

10-1.13 MAINTAINING TRAFFIC

Attention is directed to Sections 7-1.08, "Public Convenience," 7-1.09, "Public Safety," and 12, "Construction Area Traffic Control Devices," of the Standard Specifications and to the Section entitled "Public Safety" elsewhere in these special provisions, and these special provisions. Nothing in these special provisions shall be construed as relieving the Contractor from the responsibilities specified in Section 7-1.09.

The Contractor shall provide the Engineer, prior to establishing a lane closure, a contingency plan in the event of an equipment breakdown or materials failure which would delay opening the lane or lanes within the time limits specified elsewhere in these special provisions. Such contingency plan should include standby equipment and stockpiled materials for temporary use.

Acceptance of the contingency plan by the Engineer shall not relieve the Contractor from the requirement of opening the lane or lanes to public traffic as specified in "Traffic Control System for Lane Closure" of these special provisions. Full compensation for providing the contingency plan and implementing the plan shall be considered as included in the various items of work requiring lane closures.

The minimum size specified for Type II flashing arrow signs in the table following the second paragraph of Section 12-3.03, "Flashing Arrow Signs," of the Standard Specifications is amended to read "36 inches by 72 inches".

In the Standard Plans, Note 10 on Standard Plan T10, Note 9 on Standard Plan T10A, Note 5 on Standard Plan T11, Note 6 on Standard Plan T12, Note 5 on Standard Plan T13, and Note 4 on Standard Plan T14 are revised to read:

All traffic cones used for night lane closures shall have reflective cone sleeves as specified in the specifications.

The second and third paragraphs of Section 12-3.10, "Traffic Cones," of the Standard Specifications are amended to read:

During the hours of darkness traffic cones shall be affixed with reflective cone sleeves. The reflective sheeting of sleeves on the traffic cones shall be visible at 1,000 feet at night under illumination of legal high beam headlights, by persons with vision of or corrected to 20/20.

Reflective cone sleeves shall conform to the following:

1. Removable flexible reflective cone sleeves shall be fabricated from the reflective sheeting specified in the special provisions, have a minimum height of 13 inches and shall be placed a maximum of 3 inches from the top of the cone. The sleeves shall not be in place during daylight hours.
2. Permanently affixed semitransparent reflective cone sleeves shall be fabricated from the semitransparent reflective sheeting specified in the special provisions, have a minimum height of 13 inches, and shall be placed a maximum of 3 inches from the top of the cone. Traffic cones with semitransparent reflective cone sleeves may be used during daylight hours.
3. Permanently affixed double band reflective cone sleeves shall have 2 white reflective bands. The top band shall be 6 inches in height, placed a maximum of 4 inches from the top of the cone. The lower band shall be 4 inches in height, placed 2 inches below the bottom of the top band. Traffic cones with double band reflective cone sleeves may be used during daylight hours.

The type of reflective cone sleeve used shall be at the option of the Contractor. Only one type of reflective cone sleeve shall be used on the project.

The C16 and C17 designations of the signs shown on the detail "Entrance Ramp Without Turning Pockets" of Standard Plan T14 are amended to designate the signs as R16 and R17, respectively.

Lane closures shall conform to the provisions in the section of these special provisions entitled "Traffic Control System for Lane Closure."

On or before Wednesday of each week, the Contractor shall furnish to the Engineer a schedule of all proposed lane and ramp closures for the following week. Any requests for changes to the weekly schedule shall be submitted to the Engineer for approval at least 24 hours prior to the proposed change or as required by the Engineer.

Personal vehicles of the Contractor's employees shall not be parked on the traveled way or shoulders, including any section closed to public traffic.

Whenever vehicles or equipment are parked on the shoulder within 6 feet of a traffic lane, the shoulder area shall be closed as shown on the plans.

Lanes shall be closed only during the hours shown on the charts included in this section "Maintaining Traffic." Except work required under said Sections 7-1.08 and 7-1.09, work that interferes with public traffic shall be performed only during the hours shown for lane closures.

REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

NOTIFICATION OF ALTERED HORIZONTAL AND VERTICAL CLEARANCES

The Contractor shall provide the Engineer with a 21 day written notice prior to making any temporary or permanent changes at the work site that will affect existing horizontal and vertical clearances on any highway, freeway, ramp, connector, utility or railroad facility. The notice shall be in sufficient detail to show existing and proposed measurements of the alteration and the location where the measurements were taken. Within 24 hours after a change, the Contractor shall provide the Engineer with a written notice indicating the actual horizontal and vertical clearances as changed. The above notification requirements includes the removal of any temporary conditions or restrictions affecting horizontal and vertical clearances.

Temporary changes having an effect on horizontal and vertical clearances include, but are not limited to: installation of falsework, temporary bridges and pedestrian walkways; placement of temporary detours with vertical grade changes and structures, concrete barriers (K-rail, including glare screen if applicable) encroaching on a lane, shoulder, ramp or connector widths; lane shifts or widening; detours, and closure or realignment of ramps.

Permanent clearance alterations include, but are not limited to, pavement overlays under structures, erection of new sign structures or modifications to existing sign structures, seismic retrofit modifications over the traveled way, and construction of new structures.

This requirement is separate and in addition to the requirements of the "Closure Requirements and Conditions" section included in these special provisions. Failure to comply with these requirements will result in disapproved closures and no compensation will be allowed therefore.

Compensation for compliance with notification requirements

Full compensation for conforming to the requirements of this section and its notification requirements is included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor.

CLOSURE REQUIREMENTS AND CONDITIONS

Definition of closure. For the purposes and intent of this provision the terms Closure, Lane Closure or pronouns in place of them, shall be interpreted as "encroachment on any portion of the traveled way or shoulder of a highway, freeway, ramp, connector, utility or railroad facility that may affect public traffic."

General. It is the intent of this section "Closure Requirements and Conditions" that the Contractor (a), provide advance closure notification, and (b), not pursue contract work, requiring a closure, outside the time limits specified in section "Lane Requirements and Hours of Work" of these special provisions. All proposed closures will require closure plans subject to submittals and approvals as specified in the "Closure Plans" section of these special provisions. All proposed closures shall be subject to scheduling, notification and approvals on a weekly basis (Monday through Sunday cycle) as specified "Closure Scheduling and Notification" section of these special provisions. The Contractor shall not proceed with work operations requiring a closure without approved closure plans and approved closure schedules in place.

The provisions of this section, "Closure Requirements and Conditions," will not relieve the Contractor of the responsibility to comply with the provisions in section 7-1.09, "Public Safety," of the Standard Specifications. Failure to comply with these requirements will result in disapproved closures and no compensation will be allowed therefore.

CLOSURE PLANS

Work Plan. Whenever the Contractor's operations require any closure, the Contractor shall furnish for the Engineer's approval, a practicable work plan of the planned operations no later than 14 days prior to the date of the scheduled work. The work plan shall be in sufficient detail to identify all items of work, quantity, sequence, timing of operations and a list of equipment that will be used.

Contingency Plan. In conjunction with the work plan specified above, the Contractor shall provide the Engineer a practicable contingency plan for removing any closure in the event of an equipment breakdown, shortage of or lack of production of materials or any other production failure which would otherwise delay removing the closure within the time limits specified in "Lane Requirements and Hours of Work" included in this section "Maintaining Traffic" or at any time it becomes necessary to provide the lanes, shoulders, ramps, or connectors for use by public traffic due to congested conditions or for any other reason as determined by the Engineer. The contingency plan shall include sufficient detail to identify sequence, timing of operations and a list of equipment that will be used including any standby equipment and stockpiled materials that can be utilized for the immediate removal of closures.

If the Contractor is ordered by the Engineer, in writing, to remove a closure, the Contractor shall immediately commence operations to remove a closure in accordance with the approved contingency plan specified herein.

REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

The Contractor may request, in writing, permission from the Engineer to use a previously approved closure plan when the character and timing of the work contemplated does not vary significantly from the details indicated in the closure plan under consideration. The Engineer shall have the right to withdraw such permission at any time that he determines that the closure plan is impracticable or if the Contractor's actual operations deviate from the closure plan.

The Contractor shall allow three working days, from the date of submittal, for the Engineer to approve or disapprove any closure plan submitted. Disapproved closure plans will be returned for correction and the Contractor shall allow two working days for the Engineer to review corrected closure plans. Approval of the closure plans by the Engineer shall not relieve the Contractor from the requirement of removing any closure for the safe and efficient operation of public traffic, as specified in "Lane Requirements and Hours of Work" included in this section "Maintaining Traffic."

Except as provided in the "Aborted Closures" section in these special provisions, full compensation for providing closure plans, correcting the plans, implementing the plans, furnishing, placing and removal of any temporary materials regardless of how many times it is required, shall be considered as included in the contract price paid for the various items of work involved and no additional compensation will be allowed.

CLOSURE SCHEDULING AND NOTIFICATION

Contractor Submittals. On or before each Monday at noon, the Contractor shall furnish to the Engineer a written schedule of all closures for the 2 week period beginning the following Monday and ending on a Sunday, 2 weeks later. This schedule will identify: one week in advance, all proposed closures required in the performance of contract work (Week One) and; 2 weeks in advance, all planned closures required in the performance of contract work (Week Two). Closures identified in Week Two of the schedule shall be used for planning purposes and will form the basis for establishing closure entries in Week One of the following week's submittal.

The written schedule for Week One shall show locations and times when the proposed closures are to be in effect. The Contractor will be provided with copies of "Closure Request Form" (form 4CD-170) for scheduling any closure identified in Week One. Closure requests submitted with incomplete, unintelligible or inaccurate information will be returned for correction. The Contractor will be notified in writing of approval or disapproval of the submitted closure scheduling no later than 3:00 p.m. Thursday of the week preceding the scheduled work. The Contractor will also be notified whenever California Highway Patrol (CHP) assistance is scheduled in conjunction with approved lane closure schedules.

All proposed closures shall conform to the time limits specified in "Lane Requirements and Hours of Work" included in this section "Maintaining Traffic." Contractor closure schedule requests, without approved closure plans, will not be accepted for consideration of approval by the Engineer.

Changes and Cancellations. Changes, including cancellations, to a previously submitted Week One schedule, proposed by the Contractor, shall be submitted to the Engineer for approval at least 72 hours prior to the time when the closure was to be in place. The written notice to the Engineer of changes to any closure shall be made during normal office hours between the hours of 7:00 a.m. and 4:00 p.m., Monday through Friday, excluding designated legal holidays. The Contractor shall allow a minimum of 24 hours for the Engineer to approve or disapprove the requested changes. A revised request may be submitted for consideration of rescheduling of closures during the week, for work that is postponed due to weather or circumstances, beyond the control of the Contractor, which impacts the previously approved schedule.

Contractor requested changes to the previously approved Week One closure schedule not conforming to the above requirements will be reviewed at the Engineer's earliest convenience. No compensation will be allowed for disapproved closures due to Contractor initiated changes or cancellations due to weather or circumstances within the control of the Contractor.

Changes and cancellations to the previously submitted Week One schedule or approved closures for which less than 72 hours written notice is provided, will result in an administrative charge to the Contractor of $250.00 per changed or cancelled closure, up to a maximum of $1000.00 per day.

For approved closures with work involving California Highway Patrol (CHP) assistance, changes or cancellations with less than 36 hours written notice may result in charges to the Department. In such cases, the Contractor will be charged for all costs resulting from late changes or cancellations. These costs will be a minimum of $50.00 per scheduled CHP officer to a maximum 4 hours of overtime pay per scheduled CHP officer plus vehicle mileage and other costs directly related to the performance of the requested CHP assistance. In no case shall these charges exceed $750.00 per day, per incident.

All monetary charges attributable to changes and cancellations of previously approved closures are cumulative and in addition to any other deductions made under the contract. The Department will deduct these amounts from any moneys due, or that may become due the Contractor under the contract. Cancellations due to weather or circumstances, beyond the control of the Contractor, are exempt from these charges.

Full compensation for conforming to the closure scheduling and notification requirements of this section is included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor. Failure to comply with these requirements will result in disapproved closures and no compensation will be allowed therefore.

Invalid Closures. Any closure, which the Engineer has determined not to conform to the provisions of this section, "Closure Requirements and Conditions," or existing outside the time limits specified in section "Lane Requirements and Hours of Work" of these special provisions shall be considered as an invalid closure. Invalid closures shall be removed immediately from the lanes, shoulders, ramps, or connectors, unless otherwise permitted by the Engineer in writing. Upon failure of the Contractor to comply promptly with the order of the Engineer, the Engineer shall have the authority to cause the removal of the closure and to deduct the cost thereof from any moneys due or to become due the Contractor. The Contractor shall not be entitled to compensation for any impact to his operations in accordance with the "Compensation for Delayed, Disapproved or Aborted Closures" section of these special provisions due to removing an invalid closure.

COMPENSATION FOR DELAYED, DISAPPROVED OR ABORTED CLOSURES

Disapproved closures. Whenever a closure is requested in accordance with the "Closure Scheduling and Notification" section of these special provisions and the Engineer disapproves the closure because it becomes necessary to provide the lanes, shoulders, ramps, or connectors for use by public traffic due to congested conditions or for any other reason, except weather, beyond the control of the Contractor, as determined by the Engineer**,** the Contractor will be compensated for the cost of the interruption to the Contractor's operations as described below.

Delayed closures. Whenever closure is requested in accordance with the "Closure Scheduling and Notification" section of these special provisions and if there is a delay by the Engineer in approving or disapproving the requested closure, as stated therein, and the Contractor is unable to begin work at the scheduled time, the Contractor will be compensated for the cost of the interruption to the Contractor's operations as described below.

Aborted closures. At any time an approved closure is in place, in accordance with these special provisions, and it becomes necessary to provide the lanes, shoulders, ramps, or connectors for use by public traffic due to congested conditions or for any reason, except weather, beyond the control of the Contractor, as determined by the Engineer, the Contractor will be compensated for the cost of implementing the contingency plan, furnishing, placing and removal of any temporary materials and the cost of interruption to the Contractor's operations as described below.

Compensation for Delayed, Disapproved or Aborted closures will be determined as follows:

A. The Contractor will be granted an extension of time commensurate with the delay in accordance with the provisions of Section 8-1.07, "Liquidated Damages," of the Standard Specifications and the "Progress Schedule (Critical Path)" section of these special provisions.

B. The Contractor will be compensated for the idle time of forces and equipment and any additional costs involved in rescheduling and moving of equipment in accordance with the provisions of Section 8-l.09, "Right of Way Delays," of the Standard Specifications.

DAMAGES

In the event that the Contractor fails to remove the lane, shoulder, ramp or connector closures at the times specified in the "Lane Requirements and Hours of Work" included in this section "Maintaining Traffic," damage will be sustained by the State of California and it is and will be impracticable and extremely difficult to ascertain and determine the actual damage. It is therefore agreed that the Contractor will pay to the State the amounts specified herein as liquidated damages. The liquidated damages herein provided for are in addition to those specified in Standard Specification section 1-1.26, Liquidated Damages.

For each 10 minute period, or fraction thereof, that the lanes, shoulders, ramps or connectors are not available for use by public traffic at the times specified in "Lane Requirements and Hours of Work" included in this section "Maintaining Traffic", the Department will deduct $_8,800_ up to a maximum of $_158,000_ per day, per incident. These deductions by the Department will be cumulative with each location or operation involved. The Department will deduct those amounts from any moneys due, or that may become due the Contractor under the contract.

Notwithstanding the provisions in the "Damages" section of these special provisions, the Contractor shall not pursue contract work requiring a closure outside the time limits specified in section "Lane Requirements and Hours of Work" of these special provisions. Once the time limits in section "Lane Requirements and Hours of Work" have been exceeded, all rights and permission to occupy the lanes, shoulders, ramps or connectors, previously granted to the Contractor, under the terms of the contract are withdrawn. In such cases, the closure shall be subject to the provisions of the "Invalid Closures" section in these special provisions and the Contractor shall immediately commence operations to remove a closure in accordance with the approved contingency plan specified herein.

CONTRACT NO. 04-044024
REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

Should the Contractor fail to provide lanes, shoulders, ramps or connectors for use by the public as specified in these special provisions, the Contractor forfeits one day of incentive compensation for each incident or location involved. This forfeiture shall become effective 10 minutes after the closure should have been removed. This loss of incentive is in addition to any damages assessed by the Department for lane closures outside the times specified in “Lane Requirements and Hours of Work” included in this section "Maintaining Traffic".

Designated legal holidays are: January 1st, the third Monday in February, the last Monday in May, July 4th, the first Monday in September, November 11th, Thanksgiving Day, and December 25th. When a designated legal holiday falls on a Sunday, the following Monday will be a designated legal holiday. When November 11th falls on a Saturday, the preceding Friday shall be a designated legal holiday.

Minor deviations from the requirements of this section concerning hours of work which do not significantly change the cost of the work may be permitted upon the written request of the Contractor if in the opinion of the Engineer, public traffic will be better served and the work expedited. These deviations shall not be adopted by the Contractor until the Engineer has approved them in writing. All other modifications will be made by contract change order.

CONTRACT NO. 04-044024
REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

10-1.38 STEEL STRUCTURES

Construction of steel structures shall conform to the provisions in Section 55, "Steel Structures," of the Standard Specifications and these special provisions.

GENERAL

Construction of steel structures is composed of end diaphragm retrofit, bottom lateral retrofit, shear key retrofit, hinge retrofit, and splice plates, including reconstruction and relocation of existing steel members, and plug welding existing holes, as shown on the plans. Existing structural steel members to be reconstructed are designated on the plans as being replaced.

Attention is directed to "Welding Quality Control" of these special provisions.

The first paragraph in Section 55-1.02, "Drawings," of the Standard Specifications is amended to read:

55-1.02 Drawings.—The Contractor shall submit working drawings for structural steel to the Office of Structure Design, Documents Unit, P.O. Box 942874, Mail Stop 9, Sacramento, California 94274-0001 (1801 30th Street, Sacramento, CA 95816), telephone (916) 227-8230, for approval in accordance with the provisions in Section 5-1.02, "Plans and Working Drawings." For initial review, 6 sets of the drawings shall be submitted for highway bridges and 10 sets shall be submitted for railroad bridges. After review, between 6 and 12 sets, as requested by the Engineer, shall be submitted to the Office for final approval and for use during construction.

Paragraphs 7 through 8 of Section 55-1.02, "Drawings," of the Standard Specifications are amended to read:

At the completion of each structure on the contract, one set of reduced prints on 20 pound (minimum) bond paper, 11 inches by 17 inches in size, of the corrected original tracings of all working drawings for each structure shall be furnished to the Engineer. Reduced prints that are common to more than one structure shall be submitted for each structure. An index prepared specifically for the drawings for each structure containing sheet numbers and titles shall be included on the first reduced print in the set for each structure. Reduced prints for each structure shall be arranged in the order of drawing numbers shown in the index.

The edge of the corrected original tracing image shall be clearly visible and visually parallel with the edges of the page. A clear, legible symbol shall be provided on the upper left side of each page to show the amount of reduction and a horizontal and vertical scale shall be provided on each reduced print to facilitate enlargement to original scale.

Steel for members, shown on the plans as fracture critical members, shall conform to the requirements of ANSI/AASHTO/AWS D1.5, Section 12, "AASHTO/AWS Fracture Control Plan (FCP) for Non-Redundant Members." Charpy V-notch (CVN) impact values for fracture critical members shall conform to the requirements for Zone 2 in AASHTO LRFD Bridge Design Specifications, Table 6.6.6.2-2, “Fracture Toughness Requirements.”

The first sentence of the first paragraph in Section 55-1.03, "Inspection," of the Standard Specifications is amended to read:

Structural steel will be inspected at the fabrication site except as provided in "Check Testing" of the special provisions.

Additional certified test reports for fastener assemblies will be required as specified in "Fabrication" of this specification.

REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

MATERIALS

The first paragraph, including the material table, in Section 55-2.01, "Description," of the Standard Specifications is amended to read:

55-2.01 Description.—The various materials shall conform to the specifications of ASTM as listed in the following tabulation with certain modifications and additions as specified:

MATERIAL	SPECIFICATION
Structural steel	ASTM Designation: A 709/A 709M, Grade 36 [250] or A 36/A 36M[(a)]
High strength low alloy columbium vanadium steel	ASTM Designation: A 709/A 709M, Grade 50 [345] or A 572/A 572M, Grade 50 [345](a)
High strength low alloy structural steel	ASTM Designation: A 709/A 709M, Grade 50W [345 W] or A 588/A 588M[(a)]
High-yield strength, quenched and tempered alloy steel plate suitable for welding	ASTM Designation: A 709/A 709M, Grade 100 [690] and Grade 100W [690W] or A 514/A 514M[(a)]
Steel fasteners for general applications:	
Bolts and studs which include threaded rods and nonheaded anchor bolts	ASTM Designation: A 307 or AASHTO Designation: M 314, Grade 36 or 55
Nuts	ASTM Designation: A 563 including Appendix X1[(b,c)]
Washers	ASTM Designation: F 844

REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

High strength steel fasteners:	
Bolts for structural steel joints	ASTM Designation: A 325 or A 325M
Bolts and studs which include threaded rods and nonheaded anchor bolts, for general applications	ASTM Designation: A 449
Nuts	ASTM Designation: A 563 including Appendix X1[(b)] or A 563M including Appendix X1[(b,c)]
Washers	ASTM Designation: F 436 or F 436M
Carbon steel for forgings, pins and rollers	ASTM Designation: A 668/A 668M, Class D
Alloy steel for forgings	ASTM Designation: A 668/A 668M, Class G
Pin nuts	ASTM Designation: A 36/A 36M
Carbon-steel castings	ASTM Designation: A 27/A 27M, Grade 65-35 [450-240], Class 1
Malleable iron castings	ASTM Designation: A 47, Grade 32510 or A 47M, Grade 22010
Gray iron castings	ASTM Designation: A 48, Class 30B
Carbon steel structural tubing	ASTM Designation: A 500, Grade B or A 501
Steel pipe (Hydrostatic testing will not apply)	ASTM Designation: A 53, Type E or S, Grade B; A 106, Grade B; or A 139, Grade B
Stud connectors	ASTM Designation: A 108 and ANSI/AASHTO/AWS D1.5

(a) Grades that may be substituted for the equivalent ASTM Designation: A 709 steel, at the Contractor's option, subject to the modifications and additions specified and to the requirements of A 709.
(b) Nuts made and marked in accordance with the requirements of ASTM Designation: A 194/A 194M, Grade 2H are an acceptable substitution for heavy hex nuts complying with ASTM Designation: A 563, Grade DH. This substitution is permitted, provided that the zinc coating, overtapping, lubrication, rotational capacity requirements and testing of the substituted nuts meet the same requirements as specified for the A 563 nuts, including all supplementary requirements. Proof load testing and stresses required for ASTM A 194 zinc-coated nuts shall be the same as required for ASTM A 194 plain uncoated nuts.
(c) All zinc-coated nuts that will be tightened beyond snug or wrench tight shall be furnished with a dry lubricant conforming to Supplementary Requirement S2 in ASTM Designation: A 563.

The second paragraph in Section 55-2.01, "Description," of the Standard Specifications is deleted.
The fifth paragraph in Section 55-2.01, "Description," of the Standard Specifications is amended to read:

All structural steel plate used for the fabrication of members shown on the plans as main tension members or main compression members, tension and compression flanges, eyebars and hanger plates and for splice plates of tension or compression members, tension flanges and eyebars shall meet the longitudinal Charpy V-notch impact value requirements specified herein. Sampling procedures shall conform to the provisions in ASTM Designation: A 673/A 673M. The H (Heat) frequency of testing shall be used for structural steels conforming to ASTM Designations: A 709/A 709M, Grades 36, 50 and 50W. The P (Piece) frequency of testing shall be used for structural steel conforming to ASTM Designation: A 709/A 709M, Grades 100 and 100W. Charpy V-notch impact values shall be determined in accordance with ASTM Designation: E 23.

The first paragraph in Section 55-2.02, "Structural Steel," of the Standard Specifications is amended to read:

55-2.02 Structural Steel.—Unless otherwise specified or shown on the plans, all structural steel plates, shapes and bars shall conform to ASTM Designation: A 709/A 709M, Grade 50.

Fastener assemblies, and other bolts attached to structural steel with nuts and washers shall be zinc-coated.High-strength structural steel bolts and nuts that have been tightened, and then removed for any reason, shall not be reused in the retrofit work.

Rotational capacity tests prior to shipment to the job site shall be performed as specified in "Fabrication" of these special provisions.

Check Testing.—Structural steel shall conform to the designated ASTM Standard and the check testing requirements of this section.

Check samples shall be furnished for each heat of maximum thickness of:

Tension flanges and webs of fracture critical members.
Tension flanges and webs of main tension members.
Compression flanges and webs of main compression members.

Steel plates, shapes or bars containing check samples shall be furnished from the mill with extra length in order to provide for removal of material for check samples at the point of fabrication. Check samples may be cut from either end of the designated plate, shape or bar.

At the option of the Contractor, check samples may be removed at the rolling mill rather than at the point of fabrication. The sample will be removed from the mill plate that will be stripped by the fabricator to produce the designated plate and may be taken from any location within that plate. The mill plate from which samples are removed shall be marked with the same identifying numbers as are used on the samples. If the Contractor requests that samples be removed at the rolling mill, the Contractor will be charged for the cost of providing State inspection at the mill to witness the removal of samples, as provided in Measurement and Payment of these special provisions.

Unless otherwise directed, material for check samples shall be removed by the Contractor in the presence of the Engineer. Check samples for plates wider than 24 inches shall be 14 inches wide and 18 inches long with the long dimension transverse to the direction of rolling. Check samples for all other products shall be 18 inches long, taken in the direction of rolling, and the width shall be the product width. Check samples shall be removed and delivered to the Engineer before the material is fabricated into components and preferably when it is still being prepared for fabrication. The direction of rolling, heat numbers, and plate numbers shall be marked on the samples with paint or other indelible marking material or may be steel stamped in one corner of the plate.

Unless otherwise directed, check samples shall be delivered to the Transportation Laboratory at the Contractor's expense. The check samples will be tested by the Transportation Laboratory for compliance with the requirements specified in ASTM and these special provisions. Check sample test results will be reported to the Contractor within 10 working days of delivery to the Transportation Laboratory. In the event several samples are submitted on the same day, an additional day will be added for each 2 samples submitted. The test report will be made for the group of samples.

The results of the tensile and impact tests shall not vary more than 5 percent below specified minimum or 5 percent above specified maximum requirements except that if the initial check test results vary more than 5 percent but not more than 10 percent from the specified requirements, a re-test may be performed on another sample from the same heat and thickness. The results of the re-test shall not vary more than 5 percent from the original specified requirements. If the results of check tests exceed these permissible variations, all material planned for use from the heat represented by said check samples shall be subject to rejection.

FABRICATION

The first paragraph of Section 55-3.05, "Facing and Bearing Surfaces," of the Standard Specifications is amended to read:

55-3.05 Faying and Bearing Surfaces.—Surfaces of bearing and base plates and other metal bearing surfaces that are to come in contact with each other or with ground concrete surfaces or with asbestos sheet packing shall be flat to within $1/32$ inch tolerance in 12 inches and to within $1/16$ inch tolerance overall. Surfaces of bearing and base plates and other metal bearing surfaces that are to come in contact with preformed fabric pads, elastomeric bearing pads or portland cement mortar shall be flat to within $1/8$ inch tolerance in 12 inches and to within $3/16$ inch tolerance overall.

Paragraphs 1 through 5 of Section 55-3.14, "Bolted Connections," of the Standard Specifications are amended to read:

55-3.14 Bolted Connections.—Bolted connections, unless otherwise shown on the plans or specified in the special provisions, shall be made with high-strength steel fastener assemblies. Fastener assemblies for high-strength connections shall be a high-strength steel bolt, nut and washer assembly.

When threaded studs are shown on the plans to be used in high-strength fastener assemblies, these assemblies shall conform to the requirements specified herein for high-strength fastener assemblies.

Bolted connections using high-strength fastener assemblies shall conform to the "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts," approved by the Research Council on Structural Connections of the Engineering Foundation (RCSC Specification), and the requirements of these special provisions.

When reference is made to the RCSC Specification, the "Allowable Stress Design" version shall be used when allowable stress design is shown on the plans and the "Load and Resistance Factor Design" version shall be used when load and resistance factor design is shown on the plans.

All connections made with high-strength fastener assemblies shall be tensioned and inspected after tensioning, whether classified as a slip critical or bearing type connection, unless otherwise designated on the plans.

All high-strength bolts shall be installed with a hardened washer under the nut or bolt head, whichever is the element turned in tightening. Nuts shall be located, wherever practicable, on the side of the member that will not be visible from the traveled way. Nuts for bolts that will be partially embedded in concrete shall be located on the side of the member that will be encased in concrete.

All fastener assemblies used in any one joint of a high-strength bolted connection shall be from the same rotational capacity lot.

The Contractor shall provide, calibrate and maintain all equipment and tools necessary for the preliminary testing, installation and inspection of all fasteners.

Bolt tension measuring devices and torque wrenches shall be calibrated within one year prior to first being used on the job, and a minimum of once each year thereafter. This calibration shall be done by a qualified independent laboratory or authorized warranty repair and calibration center recognized by the tool manufacturer. Bolt tension measuring devices shall be calibrated, to within one percent of the actual tension value, with a minimum of 4 verification readings evenly spaced over a range of 20 to 80 percent of full scale. All torque wrenches shall have either a dial gage or digital read-out. Torque wrenches shall be calibrated, to within 2 percent of the actual torque value, with a minimum of 4 verification readings evenly spaced over a range of 20 to 100 percent of full scale. All test equipment used for certification and calibration standards shall be traceable to the National Institute of Standards and Technology.

Prior to the use of bolt tension measuring devices or torque wrenches, the Contractor shall furnish to the Engineer certificates of calibration with plots of verification readings for each device or wrench.

In addition to the submittals required in Section 55-1.03, "Inspection," of the Standard Specifications, the Contractor shall furnish certified test reports of tests on fastener components and fastener assemblies performed prior to shipment to the job-site. Certified test reports for fastener components and fastener assemblies shall be furnished to the Engineer prior to use of the fastener assembly. The certified test reports shall include the rotational capacity lot numbers for fastener assemblies supplied and test reports specified in the "Certification," "Report," "Number of Tests and Retests," and "Certification and Test Report" sections in the appropriate ASTM specifications for the fastener components. In addition, certified test reports as specified in the "Certification and Test Report" section of ASTM Designation: A 325 shall be provided for any type of bolt used in a fastener assembly.

Section 55-3.14, "Bolted Connections," of the Standard Specifications is amended by adding the following paragraphs:

55-3.14B Surface Preparation.—Contact surfaces of all high-strength bolted connections shall be cleaned and coated before assembly in accordance with the provisions for cleaning and painting structural steel in the special provisions.

55-3.14C Installation.—If water soluble lubricants are used on nuts, fastener installation will not be permitted when surface moisture is present at any high-strength bolted connection. The Engineer may require the Contractor to perform additional installation tension tests before fastener installation and tensioning is performed at any high-strength bolted connection during inclement weather.

Bolts shall be tightened to the required tension by use of a calibrated power wrench, a calibrated manual torque wrench, or the turn-of-nut method.

The threaded ends of fastener assemblies, where first full formed threads are present, shall be at least flush with, but not extend more than 1/4-inch beyond, the outer face of the nut. A maximum of one additional hardened washer may be installed under the non-turning element of the fastener assembly. The threaded ends of studs, rods and anchor bolts, shall extend at least 1/8-inch beyond the outer face of the nut.

Larger bolts, having diameters up to 1/4-inch greater than the diameter of the bolt shown on the plans, may be used if approved by the Engineer provided that spacing and edge distance requirements for the larger bolt are met and the net section is adequate.

55-3.14D Rotational Capacity Testing Prior to Shipment to Job Site.—Rotational capacity tests shall be performed on all fastener assemblies prior to shipment to the job-site. Galvanized assemblies shall be tested as galvanized. One washer shall be used under each nut for all tests.

Each combination of bolt production lot, nut lot and washer lot shall be tested as an assembly.

A rotational capacity lot number shall be assigned to each combination of lots tested. Each shipping unit of fastener assemblies shall be plainly marked with the rotational capacity lot number. A test report in conformance with the requirements of Section 14 of ASTM Designation: A 325 is required for each rotational capacity lot number.

Two fastener assemblies from each rotational capacity lot shall be tested.

The following equipment, procedure and acceptance criteria shall be used to perform rotational capacity tests on, and determine acceptance of long bolts. Long bolts are fasteners that can achieve full nut thread engagement when installed in a bolt tension measuring device.

Long Bolt Test Equipment:

1. Calibrated bolt tension measuring device with adequate tension capacity for the bolts being tested.
2. Calibrated dial or digital torque wrench. A torque multiplier may be required for large diameter bolts.
3. Washers having an inside diameter no more than 1/16 inch greater than the nominal diameter of the bolt to be tested. Spacers with the same inside diameter and equal or larger outside diameter as the washers may also be required.
4. Steel beam or member, such as a girder flange or cross frame, to which the bolt tension measuring device will be attached. The device must be accessible from the ground.

Long Bolt Test Procedure:

1. Measure the bolt length. The bolt length is the distance from the end of the threaded portion of the shank to the underside of the bolt head.
2. Install the nut on the bolt so that 3 to 5 full threads of the bolt are located between the bearing face of the nut and the underside of the bolt head. Measure and record the thread stickout of the bolt. Thread stickout is determined by measuring the distance from the outer face of the nut to the end of the threaded portion of the shank.
3. Insert the bolt into the bolt tension measuring device and install the required number of washers, and any additional spacers as needed, directly beneath the nut to produce the thread stickout measured in Step 2.
4. Tighten the nut using a hand wrench to a snug-tight condition. The snug tension shall not be less than the Table A value but may exceed the Table A value by a maximum of 2 kips.

Table A

Fastener Assembly Tension Values to Approximate Snug-Tight Condition	
Bolt Diameter (inch)	Snug Tension (kips)
1/2	1
5/8	2
3/4	3
7/8	4
1	5
1 1/8	6
1 1/4	7
1 3/8	9
1 1/2	10

5. Match-mark the assembly by placing aligning marks on one corner of the nut, across the flat on the end of the bolt, and a heavy reference line on the face plate of the bolt tension measuring device. Place an additional mark on the outside of the socket that lines up with the mark on the nut corner so that it is visible while turning the nut. Make an additional small mark on the face plate, either 2/3 of a turn, one turn, or 1 1/3 turn clockwise from the heavy reference line, depending on the bolt length being tested as shown in Table B.

Table B

Required Nut Rotation for Rotational Capacity Tests[a,b]	
Bolt Length (measured in Step 1)	Required Rotation (turn)
4 bolt diameters or less	2/3
Greater than 4 bolt diameters but no more than 8 bolt diameters	1
Greater than 8 bolt diameters[c]	1 1/3
(a) Nut rotation is relative to bolt, regardless of the element (nut or bolt) being turned. For bolts installed by 1/2 turn and less, the tolerance shall be plus or minus 30 degrees; for bolts installed by 2/3 turn and more, the tolerance shall be plus or minus 45 degrees. (b) Applicable only to connections in which all material within grip of the bolt is steel. (c) When bolt lengths exceed 12 diameters, the required rotation must be determined by actual tests in a suitable tension device simulating the actual conditions.	

6. Tension the bolt by turning the nut to achieve the applicable minimum tension value listed in Table C. After reaching this tension, record the moving torque, in foot-pounds, required to turn the nut, and also record the corresponding bolt tension value in pounds. Torque must be measured with the nut in motion. Calculate the value, T, T=[(the measured tension in pounds) x (the bolt diameter in inches) / 48].

Table C

Minimum Tension Values for Fastener Assemblies	
Bolt Diameter (inch)	Minimum Tension (kips)
1/2	12
5/8	19
3/4	28
7/8	39
1	51
1 1/8	56
1 1/4	71
1 3/8	85
1 1/2	103

7. Tension the nut further until the rotation listed in Table B is reached. The rotation is measured from the heavy reference line made on the face plate after the bolt was snug-tight. Record this bolt tension.
8. Loosen and remove the nut and examine the threads on both the nut and bolt.

Long Bolt Acceptance Criteria:

An assembly must pass all of the following requirements to be acceptable: 1) the measured moving torque (Step 6) must be less than or equal to the calculated torque value, T (Step 6), 2) the bolt tension measured in Step 7 must be greater than or equal to the applicable turn test tension value listed in Table D, 3) the nut must be able to be removed from the bolt without signs of thread stripping or galling after the required rotation in Step 7 has been achieved, 4) the bolt does not shear from torsion or fail during the test and 5) the assembly does not seize before the final rotation in Step 7 is reached. Elongation of the bolt in the threaded region between the bearing face of the nut and the underside of the bolt head will not be considered a failure. Both assemblies tested from one rotational capacity lot must pass for the rotational capacity lot to be acceptable.

Table D

Turn Test Tension Values	
Bolt Diameter (inch)	Turn Test Tension (kips)
1/2	14
5/8	22
3/4	32
7/8	45
1	59
1 1/8	64
1 1/4	82
1 3/8	98
1 1/2	118

The following equipment, procedure and acceptance criteria shall be used to perform rotational capacity tests on and determine acceptance of short bolts. Short bolts are fasteners that cannot achieve full nut thread engagement when installed in a bolt tension measuring device.

Short Bolt Test Equipment:

1. Calibrated dial or digital torque wrench. A torque multiplier may be required for large diameter bolts.
2. Spud wrench or equivalent.

3. Washers having an inside diameter no more than 1/16 inch greater than the nominal diameter of the bolt to be tested. Spacers with the same inside diameter and equal or larger outside diameter as the washers may also be required.
4. Steel plate or girder with a hole to install bolt. The hole size shall be 1/16 inch greater than the nominal diameter of the bolt to be tested. Any girder having an appropriately sized bolt hole and plate thickness with washers, and any additional spacers as needed, which will provide the proper number of threads within the grip, as required in Step 2 below, may be used.

Short Bolt Test Procedure:

1. Measure the bolt length. The bolt length is the distance from the end of the threaded portion of the shank to the underside of the bolt head.
2. Install the nut on the bolt so that 3 to 5 full threads of the bolt are located between the bearing face of the nut and the underside of the bolt head. Measure and record the thread stickout of the bolt. Thread stickout is determined by measuring the distance from the outer face of the nut to the end of the threaded portion of the shank.
3. Install the bolt into a hole on the plate or girder and install the required number of washers, and any additional spacers as needed, between the bearing face of the nut and the underside of the bolt head to produce the thread stickout measured in Step 2.
4. Tighten the nut using a hand wrench to a snug-tight condition. The snug condition shall be the full manual effort applied to the end of a 12-inch long wrench. This applied torque shall not exceed 20% of the maximum allowable torque in Table E.

Table E

Maximum Allowable Torque for Fastener Assemblies	
Bolt Diameter (inch)	Torque (ft-lbs)
1/2	145
5/8	285
3/4	500
7/8	820
1	1220
1 1/8	1500
1 1/4	2130
1 3/8	2800
1 1/2	3700

5. Match-mark the assembly by placing aligning marks on one corner of the nut, across the flat on the end of the bolt, and a heavy reference line on the steel plate or girder. Place an additional mark on the outside of the socket that lines up with the mark on the nut corner so that it is visible while turning the nut. Make two additional small marks on the steel plate or girder, one 1/3 of a turn and one 2/3 of a turn clockwise from the heavy reference line on the steel plate or girder.
6. Using the torque wrench, tighten the nut to the rotation value listed in Table F. The rotation is measured from the heavy reference line described in Step 5 made after the bolt was snug-tight. A second wrench must be used to prevent rotation of the bolt head during tightening. Measure and record the moving torque after this rotation has been reached. The torque must be measured with the nut in motion.

Table F

Nut Rotation Required for Turn-of-Nut Installation[a,b]	
Bolt Length (measured in Step 1)	Required Rotation (turn)
4 bolt diameters or less	1/3
(a) Nut rotation is relative to bolt, regardless of the element (nut or bolt) being turned. For bolts installed by 1/2 turn and less, the tolerance shall be plus or minus 30 degrees.	

(b) Applicable only to connections in which all material within grip of the bolt is steel.

7. Tighten the nut further to the 2/3 turn mark as indicated in Table G. The rotation is measured from the heavy reference line made on the plate or girder when the bolt was snug-tight.

Table G

Required Nut Rotation for Rotational Capacity Test	
Bolt Length (measured in Step 1)	Required Rotation (turn)
4 bolt diameters or less	2/3

8. Loosen and remove the nut and examine the threads on both the nut and bolt.

Short Bolt Acceptance Criteria:

An assembly must pass all of the following requirements to be acceptable: 1) the measured moving torque from Step 6 must be less than or equal to the maximum allowable torque from Table E, 2) the nut must be able to be removed from the bolt without signs of thread stripping or galling after the required rotation in Step 7 has been achieved, 3) the bolt does not shear from torsion or fail during the test and 4) the assembly does not seize before the final rotation in Step 7 is reached. Elongation of the bolt in the threaded region between the bearing face of the nut and the underside of the bolt head will not be considered a failure. Both assemblies tested from one rotational capacity lot must pass for the rotational capacity lot to be acceptable.

55-3.14E Installation Tension Testing and Rotational Capacity Testing After Arrival to Job Site.— Installation tension tests and rotational capacity tests on fastener assemblies shall be performed by the Contractor prior to acceptance or installation, and after shipment of the fastener assemblies to the job-site. The installation tension tests and rotational capacity tests shall be performed at the job-site, in the presence of the Engineer, on each rotational capacity lot of fastener assemblies.

Installation tension tests shall be performed on 3 representative fastener assemblies in accordance with Section 8, "Installation and Tightening," of the RCSC Specification. For short bolts, Section 8(d), "Joint Assembly and Tightening of Slip-Critical and Direct Tension Connections," of the RCSC Specification shall be replaced by the "Pre-Installation Testing Procedures," of the "Structural Bolting Handbook," published by the Steel Structures Technology Center, Incorporated (SBH).

The rotational capacity tests shall be performed in accordance with the procedures for rotational capacity tests in "Rotational Capacity Testing Prior to Shipment to Job Site" of these specifications.

At the Contractor's expense, additional installation tension tests and rotational capacity tests shall be performed by the Contractor on each rotational capacity lot, in the presence of the Engineer, if 1) any fastener is not used within 3 months after shipment to the jobsite, 2) fasteners are improperly handled, stored, or subjected to inclement weather prior to final tightening, or 3) if significant changes are noted in original surface condition of threads, washers or nut lubricant.

Failure of a job-site installation tension test or a rotational capacity test will be cause for rejection of all fasteners represented by the rotational capacity lot.

55-3.14F Inspection.—For all types of fastener assemblies, at least 10%, but no fewer than 2 bolts in each high-strength bolted connection shall be inspected after tensioning in accordance with the requirements of Section 9, "Inspection," of the RCSC Specification. The Contractor shall be responsible for determining the job inspecting torque as specified in Section 9(b), "Arbitration Inspection," of the RCSC Specification. The procedure described for determining arbitration torque in steps 1 through 9 of the "Arbitration of Disputes Inspection Torque Method-Short Bolts," section of the SBH, shall replace Section 9(b)(2) of the RCSC Specification for determining the job inspecting torque for short bolts. Bolt tension shall be checked at locations selected by the Engineer. All work required to perform such inspection shall be done by the Contractor in the presence of the Engineer and in such a manner that the Engineer can read the torque wrench gage during checking.

Contact surfaces and member surfaces under bolt heads or washers within the grip of all high-strength bolted connections shall be cleaned and coated before assembly in accordance with the provisions for cleaning and painting structural steel of these special provisions.

The third through fifth paragraphs of Section 55-3.17, "Welding," of the Standard Specifications are deleted.

The following sentence is added after the first sentence of ANSI/AASHTO/AWS D1.5, Subsection 6.7:

Welded backing bars shall be removed prior to performing any nondestructive testing

CONTRACT NO. 04-044024
REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

Subsection 6.7.1 of ANSI/AASHTO/AWS D1.5 is amended to read:

Complete joint penetration groove welds in main members shall be QC tested by nondestructive testing. Unless otherwise specified, radiographic testing shall be used for examination of complete joint penetration groove welds in butt joints subject to calculated tension or reversal of stresses. All complete joint penetration groove welds in T and corner joints shall be tested by ultrasonic testing. Testing of complete joint penetration groove welds in butt joints in compression or shear may be done by RT or UT.

Subsection 6.7.1.2 of ANSI/AASHTO/AWS D1.5 is amended to read:

Radiographic testing of welds shall be performed in accordance with the following frequency requirements:

1. One hundred percent of each joint subject to calculated tension or reversal of stress, except on welds in vertical butt joints in beams or girder webs, as follows:

    a) 1/6 of the of the web depth beginning at the point, or points of, maximum tension, and
    b) 25 percent of the remainder of the web depth need be tested.
    c) If unacceptable discontinuities are found in item (a) or (b) above, the remainder of the weld shall be ultrasonically tested.

2. In addition to radiographic tests required in items (a, b, and c) above, 25 percent of these same joints, in material in excess of 1/2 inch thickness shall be tested.
3. Twenty-five percent of each joint subject to compression or shear, or, at the Contractor's option, 25 percent of the total joints subject to compression or shear. When the latter is selected, the tested joints shall be distributed throughout the work and shall total at least 25 percent of the compression or shear weld length.

    a) If unacceptable discontinuities are found in spot testing, the entire length shall be tested.
    b) If unacceptable discontinuities are found in 20 percent or more of the compression or shear joints in a "lot," all compression and shear joints in that "lot " shall be tested for their full length.
    c) A "lot" is defined as those tension or compression/shear joints, or both, which were welded in accordance with the same approved WPS and nondestructively tested as a group.

4. Longitudinal butt joints in beam or girder webs shall be subject to the inspection criteria of 6. 7.2.
5. The requirements for radiographic and ultrasonic testing shall apply equally to shop and field welds.

The flat side of all butt welded joints shall not deviate from flatness by more than 3/16 inch in a length of 2 feet centered over the weld joint.

Table 2.2 of ANSI/ AASHTO/AWS D1.5 is superseded by the following table:

Base Metal Thickness of the Thicker Part Joined, in.	Minimum Partial Joint Penetration Groove Weld Size, in.*
Over 1/4 to 1/2 inclusive	3/16
Over 1/2 to 3/4 inclusive	1/4
Over 3/4 to 1 1/2 inclusive	5/16
Over 1 1/2 to 2 1/4 inclusive	3/8
Over 2 1/4 to 6 inclusive	1/2
Over 6	5/8
*Except the weld size need not exceed the thickness of the thinner part.	

ENGINEER'S ESTIMATE

04-044024

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
1	046327	TEMPORARY DECK BRIDGING	LS	LUMP SUM	LUMP SUM	
2	074019	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	LUMP SUM	LUMP SUM	
3	074020	WATER POLLUTION CONTROL	LS	LUMP SUM	LUMP SUM	
4 (S)	120090	CONSTRUCTION AREA SIGNS	LS	LUMP SUM	LUMP SUM	
5 (S)	120100	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM	LUMP SUM	
6	120159	TEMPORARY TRAFFIC STRIPE (PAINT)	LF	8,490		
7	120300	TEMPORARY PAVEMENT MARKER	EA	1,250		
8	010221	TEMPORARY TERMINAL SECTION (TYPE K)	EA	12		
9	128650	PORTABLE CHANGEABLE MESSAGE SIGN	EA	3		
10	129000	TEMPORARY RAILING (TYPE K)	LF	9,740		
11	129150	TEMPORARY TRAFFIC SCREEN	LF	9,740		
12	150711	REMOVE PAINTED TRAFFIC STRIPE	LF	4,080		
13	BLANK					
14	150722	REMOVE PAVEMENT MARKER	EA	420		
15	153221	REMOVE CONCRETE BARRIER	LF	1,100		
16	046328	ACCESS OPENING	EA	2		
17	157560	BRIDGE REMOVAL (PORTION)	LS	LUMP SUM	LUMP SUM	
18	159101	RAISE BRIDGE	LS	LUMP SUM	LUMP SUM	
19 (F)	192003	STRUCTURE EXCAVATION (BRIDGE/CONTAMINATED)	CY	680		
20 (F)	192020	STRUCTURE EXCAVATION (TYPE D/CONTAMINATED)	CY	360		

REVISED PER ADDENDUM NO. 7 DATED JULY 31, 1998

ENGINEER'S ESTIMATE
04-044024

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41 (S)	046330	SEISMIC ISOLATOR BEARING (TYPE 2)	EA	24		
42 (S)	046331	SEISMIC ISOLATOR BEARING (TYPE 3)	EA	6		
43 (S)	046332	EXPANSION JOINT ASSEMBLY	LF	147		
44 (S-F)	520102	BAR REINFORCING STEEL (BRIDGE)	LB	656,000		
45 (F)	550203	FURNISH STRUCTURAL STEEL (BRIDGE)	LB	325,000		
46 (F)	550204	ERECT STRUCTURAL STEEL (BRIDGE)	LB	325,000		
47	046333	MODIFY TIMBER CATWALK	LS	LUMP SUM	LUMP SUM	
48 (S)	590115	CLEAN AND PAINT STRUCTURAL STEEL	LS	LUMP SUM	LUMP SUM	
49 (S)	590135	SPOT BLAST CLEAN AND PAINT UNDERCOAT	SQFT	11,300		
50 (S)	590301	WORK AREA MONITORING	LS	LUMP SUM	LUMP SUM	
51 (F)	750498	MISCELLANEOUS METAL (RESTRAINER - CABLE TYPE)	LB	17,600		
52 (F)	750501	MISCELLANEOUS METAL (BRIDGE)	LB	22,800		
53	839481	CONCRETE BARRIER (TYPE 50)	LF	460		
54	839484	CONCRETE BARRIER (TYPE 50A MODIFIED)	LF	640		
55	839510	HEADLIGHT GLARE SCREEN	LF	1,100		
56	840656	PAINT TRAFFIC STRIPE (2-COAT)	LF	5,540		
57	BLANK					
58	850101	PAVEMENT MARKER (NON-REFLECTIVE)	EA	500		
59	850102	PAVEMENT MARKER (REFLECTIVE)	EA	190		
60	010222	MAINTAIN EXISTING TRAFFIC MONITORING STATIONS	LS	LUMP SUM	LUMP SUM	

ENGINEER'S ESTIMATE

04-044024

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	010223	RELOCATE 8-INCH CITY OF BENICIA WATER MAIN	LS	LUMP SUM	LUMP SUM	
62	011835	TIME RELATED OVERHEAD	WDAY	315		
63	BLANK					
64	010954	ELECTRONIC MOBILE DAILY DIARY SYSTEM DATA DELIVERY	LS	LUMP SUM	LUMP SUM	
65	070010	PROGRESS SCHEDULE (CRITICAL PATH)	LS	LUMP SUM	LUMP SUM	
66	192023	STRUCTURE EXCAVATION (TYPE H)	CY	730		
67	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

TOTAL BID: _____

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY PETE WILSON, Governor
DEPARTMENT OF TRANSPORTATION
ESC/OE MS #43
P.O. Box 942874
SACRAMENTO, CA 94274-0001

TDD (916) 654-4014

March 27, 1998

04-CC,Sol-680,780-Var
04-044024

Addendum No. 6

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in CONTRA COSTA AND SOLANO COUNTIES IN BENICIA AND MARTINEZ FROM 0.6 MILE NORTH OF MOCOCO OVERHEAD TO 0.1 MILE NORTH OF BENICIA-MARTINEZ BRIDGE AND OVERHEAD TOLL PLAZA.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened at a date to be determined later. The bid opening was previously postponed indefinitely under Addendum No. 5 dated March 11, 1998.

This addendum is being issued to revise the Notice to Contractors and Special Provisions and the Proposal and Contract.

In the Notice to Contractors, the fourth paragraph regarding goals is revised to read:

"This project has a goal of 3 percent disabled veteran business enterprise (DVBE) participation."
In the Special Provisions, Section 2, "Proposal Requirements and Conditions," is revised as attached.

In the Special Provisions, Section 3, "Submission of MBE/WBE/DVBE Information and Award and Execution of Contract," is replaced with the new Section 3, "Submission of DVBE Information and Award and Execution of Contract," as attached.

In the Special Provisions, Section 5-1.13 "MBE, WBE and DVBE Records," is replaced with the new Section 5-1.13, "DVBE Records," as attached.

In the Special Provisions, Section 5-1.14 "Performance of MBE, WBE and DVBE Subcontractors and Suppliers," is replaced with the new Section 5-1.14, "Performance of DVBE Subcontractors and Suppliers," as attached.

In the Special Provisions, Section 5-1.15, "Subcontracting," is revised as attached.

In the Proposal and Contract, the Bidder Information Forms pertaining to goals and good faith efforts are revised as attached.

In the proposal and Contract Book, the Performance Bond amount and the Payment Bond amount are revised to 100 percent of bid amount.

To Proposal and Contract book holders:

- INDICATE RECEIPT OF THIS ADDENDUM BY FILLING IN THE NUMBER OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE SIGNATURE PAGE OF THE PROPOSAL.

- Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

- Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail) to (Proposal and Contract), (all) book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

NICK YAMBAO, Chief
Plans, Specifications &
Estimates Branch
Office of Office Engineer

Attachments

SECTION 2. PROPOSAL REQUIREMENTS AND CONDITIONS

2-1.01 GENERAL

The bidder's attention is directed to the provisions in Section 2, "Proposal Requirements and Conditions," of the Standard Specifications and these special provisions for the requirements and conditions which the bidder must observe in the preparation of the proposal form and the submission of the bid.

In addition to the subcontractors required to be listed in accordance with Section 2-1.054, "Required Listing of Proposed Subcontractors," of the Standard Specifications, each proposal shall have listed therein the name and address of each DVBE subcontractor to be used for credit in meeting the goal, and to whom the bidder proposes to directly subcontract portions of the work. The list of subcontractors shall also set forth the portion of work that will be done by each subcontractor listed. A sheet for listing the subcontractors is included in the Proposal.

If the Bidder submits cash or a cashier's check or a certified check as the form of bidder's security (See said Section 2-1.07 of the Standard Specifications), the Bidder shall also include with the bid submittal a signed and notarized affidavit from an admitted surety insurer that contract bonds, as required by Section 3-1.02, "Contract Bonds," of the Standard Specifications, will be provided within the time specified elsewhere in these special provisions for executing and returning the contract for approval.

Attention is directed to Section, "Escrow of Bid Documentation" elsewhere in these special provisions. Said section contains some conditions for acceptance of proposals.

The form of Bidder's Bond mentioned in the last paragraph in Section 2-1.07, "Proposal Guaranty," of the Standard Specifications will be found following the signature page of the Proposal.

In accordance with Public Contract Code Section 7106, a Noncollusion Affidavit is included in the Proposal. Signing the Proposal shall also constitute signature of the Noncollusion Affidavit.

If the bidder claims a mistake was made in his bid, the bidder shall give the Department written notice within 48 hours, not including Saturdays, Sundays and legal holidays, after the opening of bids of the alleged mistake, in lieu of the 5 days specified in Section 2-1.095, "Relief of Bidders," in the Standard Specifications. The notice of alleged mistake shall specify in detail how the mistake occurred.

2-1.02 DISABLED VETERAN BUSINESS ENTERPRISE (DVBE)

Section 10115 of the Public Contract Code requires the Department to implement provisions to establish a goal for Disabled Veterans Business Enterprise (DVBE) in contracts.

It is the policy of the Department that Disabled Veteran Business Enterprise (DVBE) shall have the maximum opportunity to participate in the performance of contracts financed solely with state funds. The Contractor shall ensure that DVBEs have the maximum opportunity to participate in the performance of this contract and shall take all necessary and reasonable steps for this assurance. The Contractor shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of subcontracts. Failure to carry out the requirements of this paragraph shall constitute a breach of contract and may result in termination of this contract or other remedy the Department may deem appropriate.

Bidder's attention is directed to the following:

(a) "Disabled Veteran Business Enterprise" (DVBE) means a business concern certified as a DVBE by the Office of Small and Minority Business, Department of General Services.

(b) A DVBE may participate as a prime contractor, subcontractor, joint venture partner with a prime or subcontractor, or vendor of material or supplies;

(c) Credit for DVBE prime contractors will be 100 percent.

(d) A DVBE joint venture partner must be responsible for specific contract items of work, or portions thereof. Responsibility means actually performing, managing and supervising the work with its own forces. The DVBE joint venture partner must share in the ownership, control, management responsibilities, risks and profits of the joint venture. The DVBE joint venturer must submit the joint venture agreement with the Caltrans Bidder DVBE Information form required in Section 2-1.04, "Submission of DVBE Information," elsewhere in these special provisions;

(e) A DVBE must perform a commercially useful function, i.e., must be responsible for the execution of a distinct element of the work and must carry out its responsibility by actually performing, managing and supervising the work;

(f) Credit for DVBE vendors of materials or supplies is limited to 60 percent of the amount to be paid to the vendor for the material unless the vendor manufactures or substantially alters the goods;

(g) Credit for trucking by DVBEs will be as follows:

CONTRACT NO.04-044024
REVISED PER ADDENDUM NO. 6 DATED MARCH 27, 1998

(1) One hundred percent of the amount to be paid when a DVBE trucker will perform the trucking with his/her own trucks, tractors and employees;

(2) Twenty percent of the amount to be paid to DVBE trucking brokers who do not have a "certified roster";

(3) One hundred percent of the amount to be paid to DVBE trucking brokers who have:

a. signed agreements that all trucking will be performed by DVBE truckers if credit is toward the DVBE goal;

b. a "certified roster" showing that all trucks are owned by DVBEs; and

c. a signed statement on the "certified roster" that indicates that 100 percent of revenue paid by the broker will be paid to the DVBEs listed on the "certified roster".

(4) Twenty percent of the amount to be paid to trucking brokers who are not a DVBE but who have:

a. signed agreements with DVBE truckers assuring that at least 20 percent of the trucking will be performed by DVBE truckers if credit is toward the DVBE goal;

b. a "certified roster" showing that at least 20 percent of the number of trucks are owned by DVBE truckers; and

c. a signed statement on the "certified roster" that indicates that at least 20 percent of the revenue paid by the broker will be paid to the DVBEs listed on the "certified roster".

The "certified roster" referred to herein shall conform to the requirements in Section 3-1.01A, "DVBE Information," elsewhere in these special provisions;

(h) DVBEs and DVBE joint venture partners must be certified DVBEs as determined by the Department of General Services, Office of Small and Minority Business, 1531 "I" Street, Second Floor, Sacramento, CA 95814, on the date bids for the project are opened before credit may be allowed toward the DVBE goal.

It is the Contractor's responsibility to verify that DVBEs are certified;

(i) Noncompliance by the Contractor with these requirements constitutes a breach of this contract and may result in termination of the contract or other appropriate remedy for a breach of this contract.

2-1.03 DVBE GOAL FOR THIS PROJECT

The Department has established the following goal for Disabled Veteran Business Enterprise (DVBE) participation for this project:

Disabled Veteran Business Enterprise (DVBE), 3 percent.

It is the bidder's responsibility to make a sufficient portion of the work available to subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DVBE subcontractors and suppliers, so as to assure meeting the goal for DVBE participation.

The Office of Small and Minority Business, Department of General Services, may be contacted at (916) 322-5060 or visit their internet web site at www.dgs.ca.gov/osmb for program information and certification status. The Department's Business Enterprise Program may also be contacted at (916) 227-9599 or the internet web site at http://www.dot.ca.gov/hq/bep/.

2-1.04 SUBMISSION OF DVBE INFORMATION

The required DVBE information shall be submitted **WITH THE BID** on the following "CALTRANS BIDDER - DVBE - INFORMATION" and "TELEPHONE LOG AND LIST OF REJECTED DVBEs."

It is the bidder's responsibility to meet the goal for DVBE participation or to establish that, prior to bidding, the bidder made good faith efforts to do so based on the information in the "CALTRANS BIDDER - DVBE - INFORMATION" and "TELEPHONE LOG AND LIST OF REJECTED DVBEs."

REVISED PER ADDENDUM NO. 6 DATED MARCH 27, 1998

The information to show that the DVBE goal will be met on the "CALTRANS BIDDER - DVBE - INFORMATION" form shall include the names of DVBEs and DVBE joint venture partners to be used, with a complete description of work or supplies to be provided by each and the dollar value of each such DVBE transaction. When 100 percent of a contract item of work is not to be performed or furnished by a DVBE, a description of the exact portion of said work to be performed or furnished by that DVBE shall be included in the DVBE information, including the planned location of said work. DVBE prime contractors shall enter their Office of Small and Minority Business (OSMB) - DVBE reference number and/or DBA name, as listed with OSMB, on the line provided. (Note: DVBE subcontractors to whom the bidder proposes to directly subcontract portions of the work are to be named in the bid. - See Section 2-1.054, "Required Listing of Proposed Subcontractors," of the Standard Specifications and Section 2-1.01, "General," of these special provisions, regarding listing of proposed subcontractors).

If credit for trucking by a DVBE trucking broker is shown on the bidder's information as 100 percent of the revenue to be paid by the broker is to be paid to DVBE truckers, a "certified roster" of the broker's trucks to be used must be included with the bid. The "certified roster" must indicate that all the trucks are owned by certified DVBEs and must show the DVBE truck numbers, owner's name, Public Utilities Commission Cal-T numbers, and the DVBE certification numbers. The roster must indicate that all revenue paid by the broker will be paid to DVBEs listed on the "certified roster".

If credit for trucking by a trucking broker who is not a DVBE is shown in the bidder's information, a "certified roster" of the broker's trucks to be used must be included with the bid. The "certified roster" must indicate that at least 20 percent of the broker's trucks are owned by DVBEs and must show the DVBE truck numbers, owner's name, Public Utilities Commission Cal-T numbers, and the DVBE certification numbers. The roster must indicate that at least 20 percent of the revenue paid by the broker will be paid to DVBEs listed on the "certified roster".

Information necessary to establish the bidder's good faith efforts to meet the DVBE goals shall be included in the "TELEPHONE LOG AND LIST OF REJECTED DVBEs" form located in the Proposal and shall include:

1. The names, dates and times of notices of all certified DVBEs solicited by telephone for this project and the dates, times and methods used for following up initial solicitations to determine with certainty whether the DVBEs were interested.
2. The names of DVBEs who submitted bids which were not accepted and the reason for rejection of the DVBEs bid.

Bidders are cautioned that even though their submittal indicates they will meet the stated DVBE goal, their submittal should also include the telephone log and rejected DVBE information to protect their eligibility for award of the contract in the event the Department, in its review, finds that the goal has not been met.

It is the bidders responsibility to be available, by phone, both the day of and the day after the bid opening to answer questions and provide good faith effort clarification. The bidder shall also assure that listed DVBEs are available, by phone, on both days.

If it is found that the goal has not been met, the Department will review the information submitted with the bid to determine the bidder’s good faith effort. In the event that the Department determines that a bidder has not made a good faith effort based on the information submitted with the bid and its independent investigation, the Department’s decision will be final.

2-1.05 SMALL BUSINESS PREFERENCE

Attention is directed to "Award and Execution of Contract" elsewhere in these special provisions.

Attention is also directed to the Small Business Procurement and Contract Act, Government Code Section 14835, et seq and Title 2, California Code of Regulations, Section 1896, et seq.

Bidders who wish to be classified as a Small Business under the provisions of those laws and regulations, shall be certified as Small Business by the Department of General Services, Office of Small and Minority Business, 1531 "I" Street, Second Floor, Sacramento, CA 95814.

To request Small Business Preference, bidders shall fill out and sign the Request for Small Business Preference form in the Proposal and shall attach a copy of their Office of Small and Minority Business (OSMB) small business certification letter to the form. The bidder's signature on the Request for Small Business Preference certifies, under penalty of perjury, that the bidder is certified as Small Business at the time of bid opening and further certifies, under penalty of perjury, that under the following conditions, at least 50 percent of the subcontractors to be utilized on the project are either certified Small Business or have applied for Small Business certification by bid opening date and are subsequently granted Small Business certification.

The conditions requiring the aforementioned 50 percent level of subcontracting by Small Business subcontractors apply if:

1. The lowest responsible bid for the project exceeds $100 000; and
2. The project work to be performed requires a Class A or a Class B contractor's license; and
3. Two or more subcontractors will be used.

If the above conditions apply and Small Business Preference is granted in the award of the contract, the 50 percent Small Business subcontractor utilization level shall be maintained throughout the life of the contract.

2-1.06 CALIFORNIA COMPANY PREFERENCE

Attention is directed to "Award and Execution of Contract" of these special provisions.

In accordance with the requirements of Section 6107 of the Public Contract Code, a "California company" will be granted a reciprocal preference for bid comparison purposes as against a nonresident contractor from any state that gives or requires a preference to be given contractors from that state on its public entity construction contracts.

A "California company" means a sole proprietorship, partnership, joint venture, corporation, or other business entity that was a licensed California contractor on the date when bids for the public contract were opened and meets one of the following:

(1) Has its principal place of business in California.

(2) Has its principal place of business in a state in which there is no local contractor preference on construction contracts.

(3) Has its principal place of business in a state in which there is a local contractor construction preference and the contractor has paid not less than $5000 in sales or use taxes to California for construction related activity for each of the five years immediately preceding the submission of the bid.

To carry out the "California company" reciprocal preference requirements of Section 6107 of the Public Contract Code, all bidders shall fill out and sign the California Company Preference form in the Proposal. The bidder's signature on the California Company Preference form certifies, under penalty of perjury, that the bidder is or is not a "California company" and if not, the amount of the preference applied by the state of the nonresident company.

A nonresident Contractor shall disclose any and all bid preferences provided to the nonresident Contractor by the state or country in which the nonresident Contractor has its principal place of business.

Proposals without the California Company Preference form filled out and signed may be rejected.

REVISED PER ADDENDUM NO. 6 DATED MARCH 27, 1998

SECTION 3. AWARD AND EXECUTION OF CONTRACT

The bidder's attention is directed to the provisions in Section 3, "Award and Execution of Contract," of the Standard Specifications and these special provisions for the requirements and conditions concerning award and execution of contract.

The award of contract, if it be awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed and who has met the goals for DVBE participation or has demonstrated, to the satisfaction of the Department, good faith effort to do so. Meeting the goals for DVBE participation or demonstrating, to the satisfaction of the Department, good faith efforts to do so is a condition for being eligible for award of contract.

It is anticipated that this contract will be awarded within 10 days after the bid opening.

Each of the two bonds required in Section 3-1.02, "Contract Bonds," of the Standard Specifications shall be in a sum equal to 100 percent of the contract price.

The contract shall be signed by the successful bidder and shall be received with contract bonds by the Department within **4 days**, including Saturdays, Sundays and legal holidays, after the bidder has received notice that the contract has been awarded. Failure to do so shall be just cause for forfeiture of the proposal guaranty. The executed contract documents shall be delivered to the following address: Department of Transportation, P.O. Box 942874, Sacramento, CA 94274-0001, Attn: Office Engineer (MS 43)- Contracts.

Within 2 days, not including Saturdays, Sundays and legal holidays, of return of the executed contract and bonds, the Department will notify the successful bidder of either approval of the contract by the Attorney General or the attorney appointed and authorized to represent the Department of Transportation, or disapproval of the submittal. Should the Department fail to provide notification within said 2 days, the delay will be considered a right of way delay as specified in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

A "Vendor Data Record" form will be included in the contract documents to be executed by the successful bidder. The purpose of the form is to facilitate the collection of taxpayer identification data. The form shall be completed and returned to the Department by the successful bidder with the executed contract and contract bonds. For the purposes of the form, vendor shall be deemed to mean the successful bidder. The form is not to be completed for subcontractors or suppliers. Failure to complete and return the "Vendor Data Record" form to the Department as provided herein will result in the retention of 20 percent of payments due the contractor and penalties of up to $20 000. This retention of payments for failure to complete the "Vendor Data Record" form is in addition to any other retention of payments due the Contractor.

Attention is also directed to "Small Business Preference" of these special provisions. Any bidder who is certified as a Small Business by the Department of General Services, Office of Small and Minority Business will be allowed a preference in the award of this contract, if it be awarded, under the following conditions:

(1) The apparent low bidder is not certified as a Small Business, or has not filled out and signed the Request for Small Business Preference included with the bid documents and attached a copy of their Office of Small and Minority Business (OSMB) small business certification letter to the form; and

(2) The bidder filled out and signed the Request for Small Business Preference form included with the bid documents and attached a copy of their Office of Small and Minority Business (OSMB) small business certification letter to the form.

The small business preference will be a reduction in the bid submitted by the small business contractor, for bid comparison purposes, by an amount equal to 5 percent of the amount bid by the apparent low bidder, the amount not to exceed $50 000. If this reduction results in the small business contractor becoming the low bidder, then the contract will be awarded to the small business contractor on the basis of the actual bid of the small business contractor notwithstanding the reduced bid price used for bid comparison purposes.

Attention is also directed to "California Company Preference" of these special provisions.

The amount of the California company reciprocal preference shall be equal to the amount of the preference applied by the state of the nonresident contractor with the lowest responsive bid, except where the "California company" is eligible for a California Small Business Preference, in which case the preference applied shall be the greater of the two, but not both.

If the bidder submitting the lowest responsive bid is not a "California company" and with the benefit of the reciprocal preference, a "California company's" responsive bid is equal to or less than the original lowest responsive bid, the "California company" will be awarded the contract at its submitted bid price except as provided below.

Small business bidders shall have precedence over nonsmall business bidders in that the application of the "California company" preference for which nonsmall business bidders may be eligible shall not result in the denial of the award to a small business bidder.

REPLACED PER ADDENDUM NO. 6 DATED MARCH 27, 1998

5-1.13 DVBE RECORDS

The Contractor shall maintain records of all subcontracts entered into with certified DVBE subcontractors and records of materials purchased from certified DVBE suppliers. The records shall show the name and business address of each DVBE subcontractor or vendor and the total dollar amount actually paid each DVBE subcontractor or vendor.

Upon completion of the contract, a summary of these records shall be prepared on Form CEM-2402 and certified correct by the Contractor or the Contractor's authorized representative, and shall be furnished to the Engineer.

5-1.14 PERFORMANCE OF DVBE SUBCONTRACTORS AND SUPPLIERS

The DVBEs listed by the Contractor in response to the requirements in Section 2-1.04, "Submission of DVBE Information", in these special provisions, which are determined by the Department to be certified DVBEs, shall perform the work and supply the materials for which they are listed unless the Contractor has received prior written authorization to perform the work with other forces or to obtain the materials from other sources.

Authorization to utilize other forces or sources of materials may be requested for the following reasons:

(1) The listed DVBE, after having had a reasonable opportunity to do so, fails or refuses to execute a written contract, when such written contract, based upon the general terms, conditions, plans and specifications for the project, or on the terms of such subcontractor's or supplier's written bid, is presented by the Contractor.

(2) The listed DVBE becomes bankrupt or insolvent.

(3) The listed DVBE fails or refuses to perform his subcontract or furnish the listed materials.

(4) The Contractor stipulated that a bond was a condition of executing a subcontract and the listed DVBE subcontractor fails or refuses to meet the bond requirements of the Contractor.

(5) The work performed by the listed subcontractor is substantially unsatisfactory and is not in substantial accordance with the plans and specifications, or the subcontractor is substantially delaying or disrupting the progress of the work.

(6) The listed DVBE subcontractor is not licensed pursuant to the Contractor's License Law.

(7) It would be in the best interest of the State.

The Contractor shall not be entitled to any payment for such work or material unless it is performed or supplied by the listed DVBE or by other forces (including those of the Contractor) pursuant to prior written authorization of the Engineer.

REPLACED PER ADDENDUM NO. 6 DATED MARCH 27, 1998

5-1.15 SUBCONTRACTING

Attention is directed to the provisions in Section 8-1.01, "Subcontracting," of the Standard Specifications, Section 2, "Proposal Requirements and Conditions," Section 2-1.04, "Submission of DVBE Information," and Section 3 Award and Execution of Contract," elsewhere in these special provisions and these special provisions.

The second sentence in the third paragraph of said Section 8-1.01 is amended to read:

When items of work in the Engineer's Estimate are preceded by the letters (S) or (S-F), said items are designated as "Specialty Items."

The first sentence in the third paragraph of said Section 8-1.01 is amended to read:

The Contractor shall perform with his own organization contract work amounting to not less than 30 percent of the original total contract price, except that any designated "Specialty Items" may be performed by subcontract and the amount of such "Specialty Items" so performed may be deducted from the original total contract price before computing the amount of work required to be performed by the Contractor with his own organization.

The DVBE information furnished under Section 2-1.04, "Submission of DVBE Information," of these special provisions is in addition to the subcontractor information required to be furnished under said Section 8-1.01, "Subcontracting," and Section 2-1.054, "Required Listing of Proposed Subcontractors," of the Standard Specifications.

Section 10115 of the Public Contract Code requires the Department to implement provisions to establish a goal for Disabled Veteran Business Enterprise (DVBE) participation in highway contracts that are state funded. As a part of this requirement:

1. No substitution of a DVBE subcontractor shall be made at any time without the written consent of the Department, and
2. If a DVBE subcontractor is unable to perform successfully and is to be replaced, the Contractor will be required to make good faith efforts to replace the original DVBE subcontractor with another DVBE subcontractor.

The requirement in Section 2-1.02, "Disabled Veteran Business Enterprise (DVBE)," of these special provisions that DVBEs must be certified on the date bids are opened does not apply to DVBE substitutions after award of the contract.

REVISED PER ADDENDUM NO. 6 DATED MARCH 27, 1998

CALTRANS BIDDER - DVBE - INFORMATION

-- DO NOT DETACH --
THIS INFORMATION SHALL BE SUBMITTED WITH YOUR BID PROPOSAL

DIST- CO.- RTE.-P.M. : _____ 04-CC,Sol-680,780-Var

DIST-CONTRACT NO.: _____ 04-044024.

BID AMOUNT $ _____

BID OPENING DATE: _____

BIDDER'S NAME _____

DVBE GOAL FROM CONTRACT: _____ %

DVBE PRIME CONTRACTOR INFORMATION _____ *

CONTRACT ITEM NO.	ITEM OF WORK AND DESCRIPTION OR SERVICES TO BE SUBCONTRACTED OR MATERIALS TO BE PROVIDED**	FOR CALTRANS ONLY	NAME OF DVBEs (must be certified on the date bids are opened) (Indicate Second and Lower Tier Subs)	FOR CALTRANS ONLY	DOLLAR AMOUNT *** DVBE

	Total Claimed Participation	**$_____** **_____%**

* DVBE prime contractors shall enter their OSMB -DVBE reference number or their DBA name as listed with OSMB. DVBE prime contractors will have 100 percent DVBE participation and shall not complete the above table.

** If 100% of an item is not performed or furnished by DVBEs, describe the exact portion, including the planned location of work to be performed, of item to be performed or furnished by DVBE.

*** Credit for a DVBE supplier, who is not a manufacturer, is limited to 60% of the amount paid to the supplier. Credit for truck brokers may be limited to 20 % of the amount paid for trucking. (See Section 2-1.02 of the Special Provisions.)

IMPORTANT: Names of First Tier DVBE Subcontractors and their respective item(s) of work listed above shall be consistent with the names and items of work in the "List of Sub-contractors" submitted with bid pursuant to the Subcontractors Listing Law and Section 2-1.01, "General," of the Special Provisions. Identify Second and Lower Tier Subcontractors on this form.

_____
Signature of Bidder **Date**

_____
(Area Code) Telephone Number

_____
Person to Contact **(Please Type or Print)**

DVBE CT Bidder Information (Rev 09-25-97)

REVISED PER ADDENDUM NO. 6 DATED MARCH 27, 1998

- DO NOT DETACH -
THIS INFORMATION SHALL BE INCLUDED WITH YOUR BID PROPOSAL

TELEPHONE LOG AND LIST OF REJECTED DVBEs

Bidders shall submit the following information to demonstrate that a good faith effort to meet the DVBE goal has been made if their CALTRANS BIDDER - DVBE - INFORMATION form indicates that the DVBE goal will not be met.

Even if the bidder's CALTRANS BIDDER - DVBE - INFORMATION form indicates the DVBE goal will be met, bidders should submit the following information to protect their eligibility for award of the contract. This is important because the submittal of only the CALTRANS BIDDER - DVBE - INFORMATION form will not normally provide sufficient information to demonstrate that a good faith effort was made. A bidder may not meet the DVBE goal after the submittal is analyzed by Caltrans for various reasons, e.g., if the subcontractor submitted by the bidder was not certified on the date bids were opened, or if the bidder made a mathematical error.

TELEPHONE LOG

The names, dates and times of notices of all certified DVBEs solicited by telephone for this project and the dates, times and methods used for following up initial solicitations to determine with certainty whether the DVBEs were interested:

Names of DVBEs Solicited	Solicitations	Dates and Times

LIST OF REJECTED DVBEs

Names of Rejected DVBEs	Reasons for Rejection of DVBEs:

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY PETE WILSON, Governor
DEPARTMENT OF TRANSPORTATION
ESC/OE MS #43
P.O. Box 942874
SACRAMENTO, CA 94274-0001

TDD (916) 654-4014

March 11, 1998

04-CC,Sol-680,780-Var
04-044024

Addendum No. 5

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in CONTRA COSTA AND SOLANO COUNTIES IN BENICIA AND MARTINEZ FROM 0.6 MILE NORTH OF MOCOCO OVERHEAD TO 0.1 MILE NORTH OF BENICIA-MARTINEZ BRIDGE AND OVERHEAD TOLL PLAZA.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work were to be opened on March 24, 1998.

This addendum is being issued to postpone the bid opening date indefinitely. The indefinite postponement is due to uncertainty of date when the Right of Entry agreement into Union Pacific Railroad will be obtained.

An addendum will follow advising you of the new bid opening date and other changes.

To Proposal and Contract book holders:

- INDICATE RECEIPT OF THIS ADDENDUM BY FILLING IN THE NUMBER OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE SIGNATURE PAGE OF THE PROPOSAL.

- Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

- Inform subcontractors and suppliers as necessary.

This office is sending this addendum by confirmed facsimile to all book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

NICK YAMBAO, Chief
Plans, Specifications &
Estimates Branch
Office of Office Engineer

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY PETE WILSON, Governor
DEPARTMENT OF TRANSPORTATION
ESC/OE MS#43
P.O. Box 942874
SACRAMENTO, CA 94274-0001

TDD (916) 654-4014

December 12, 1997

04-CC,Sol-680,780-Var
04-044024

Addendum No. 4

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in CONTRA COSTA AND SOLANO COUNTIES IN BENICIA AND MARTINEZ FROM 0.6 MILE NORTH OF MOCOCO OVERHEAD TO 0.1 MILE NORTH OF BENICIA-MARTINEZ BRIDGE AND OVERHEAD TOLL PLAZA.

The revisions declared in this addendum are an essential part of the contract.

Bids for this work were to be opened on January 6, 1998.

This addendum is being issued to postpone the bid opening date until March 24, 1998. The purpose of the postponement is to allow time to secure a railroad right of entry agreement.

To Proposal and Contract book holders:

INDICATE RECEIPT OF THIS ADDENDUM BY FILLING IN THE NUMBER OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE SIGNATURE PAGE OF THE PROPOSAL.

Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This office is sending this addendum by confirmed facsimile to all book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

NICK YAMBAO, Chief
Plans, Specifications &
Estimates Branch
Office of Office Engineer

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY PETE WILSON, Governor
DEPARTMENT OF TRANSPORTATION
ESC/OE MS#43
P.O. Box 942874
SACRAMENTO, CA 94274-0001

TDD (916) 654-4014

December 5, 1997

04-CC,Sol-680,780-Var
04-044024

Addendum No. 3

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in CONTRA COSTA AND SOLANO COUNTIES IN BENICIA AND MARTINEZ FROM 0.6 MILE NORTH OF MOCOCO OVERHEAD TO 0.1 MILE NORTH OF BENICIA-MARTINEZ BRIDGE AND OVERHEAD TOLL PLAZA.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on January 6, 1998 instead of the current date of December 16, 1997.

This addendum is being issued to set a new bid opening date as shown herein, provide a handout and revise the Project Plans, the Notice to Contractors and Special Provisions, and the Engineer's Estimate.

A copy of Contractor's Inquiry Responses No. 3 dated December 3, 1997 is provided to each Proposal and Contract Book holder.

Project Plan Sheet 119 is revised as attached.

Project Plan Sheet 50 is revised as follows:

Under "Quantities":

a. "Structure Excavation (Bridge) 1,410 CY" is deleted.
b. "Structure Excavation (Type D)" is revised to "Structure Excavation (Type D/Contaminated)."
c. "Structure Excavation (Bridge/Contaminated) 680 CY" is added.
d. "Structure Excavation (Type H) 730 CY" is added.

Project Plan Sheet 126 is revised as follows:

Under "Legend", "Structure Excavation (Type D)" is revised to "Structure Excavation (Type D/Contaminated)."

In the Special Provisions, in Section 5-1.22, "Relations With U.S. Army Corps of Engineers", in the fourth paragraph, Subparagraph No. 4 is revised as follows:

"4. Special Condition No. 7 of the Corps of Engineers permit letter dated March 4, 1997 is to be disregarded."

In the Special Provisions, in Section 5-1.29, "Access to Jobsite", the second paragraph is revised as follows:

“Contractor access to Pier 13 shall only be from the bridge deck or catwalks.”

In the Special Provisions, Section 5-1.39, "Environmentally Sensitive Area" is added as follows.

"5-1.39 ENVIRONMENTALLY SENSITIVE AREA

The Contractor's attention is directed to the designated environmentally sensitive area (ESA) in the vicinity of Piers 13, & 14 as shown on the plans. The ESA is defined as the area from the shoreline to contour elevation 40.

Within the boundary of the ESA, no construction or construction-related activities will be allowed."

In the Special Provisions, in Section 10-1.28, "Seismic Isolator Bearings"; in Sub-Section, "Prototype and Proof Testing" and in Sub-Section, "Prototype Testing" thereof; the first sub-paragraph of the third paragraph is revised as follows:

"Prototype Test 1. Three fully reversed cycles of load at lateral displacement corresponding to the maximum thermal lateral displacement shown on the plans. The test velocity shall not be less than 0.01 inches per minute and not more than 1.2 inches per minute."

In the Special Provisions, Pages 26, 27, 44, 49A, 49B and 83 have been revised and Pages 27A, 27B, 44A and 83A through 83E have been added as attached.

In the "Copy of Engineer's Estimate" in the NOTICE TO CONTRACTORS and the "Engineer's Estimate" in the PROPOSAL, Items 19, 20, 22 and 66 are revised and Item 67 is added as attached.

To Proposal and Contract book holders:

REPLACE PAGES 3, 4 and 6 OF THE ENGINEER'S ESTIMATE IN THE PROPOSAL WITH THE ATTACHED REVISED PAGES 3, 4 and 6 OF THE ENGINEER'S ESTIMATE. THE REVISED ENGINEER'S ESTIMATE IS TO BE USED IN THE BID SUBMITTAL AND INSERTED IN THE PROPOSAL.

INDICATE RECEIPT OF THIS ADDENDUM BY FILLING IN THE NUMBER OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE SIGNATURE PAGE OF THE PROPOSAL.

Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

NICK YAMBAO, Chief
Plans, Specifications &
Estimates Branch
Office of Office Engineer

Attachments

5-1.31 PERMITS AND LICENSES

Attention is directed to Section 7-1.04, "Permits and Licenses," of the Standard Specifications and these special provisions.

In addition to the permits described elsewhere in these special provisions, the Department has obtained the following rights of entry for this project:

Right-of-Entry into Benicia Industries, Inc.
Right-of-Entry into Union Pacific Railroad Company
Right-of-Entry into TOSCO Corporation

Copies of these rights of entry can be obtained at the Department of Transportation, Plans and Bid Documents, Room 0200, Transportation Building, 1120 N Street, P.O. Box 942874, Sacramento, California 94274-0001, Telephone No. (916) 654-4490, or may be seen at the office of the Toll Bridge Seismic Program Duty Senior's Desk at 111 Grand Avenue, Oakland, California 94612-3717, Telephone No. (510) 286-5549.

Full compensation for conforming to the requirements in these rights of entry shall be considered as included in the contract prices paid for the various items of work and no additional compensation will be allowed therefor.

5-1.32 STATE OWNED CATWALKS AND SCAFFOLDS

On the Benicia-Martinez Bridge, there are State owned catwalks that will be available for Contractor's use when not being used by the bridge paint and maintenance forces. Arrangements for their use shall be made to the Engineer and maintenance forces 7 calendar days in advance.

Attention is directed to "Cooperation" elsewhere in these special provisions.

One of the two existing catwalks at both ends of the bridge shall be available for use by State maintenance personnel and other contractors at all the times. The catwalks are not to be used for the storage of equipment and materials.

State maintenance personnel will instruct Contractor's personnel on how to use the catwalks. Thereafter, operation of the catwalks for contract work will be the responsibility of the Contractor.

The catwalks were designed to support maintenance personnel using small tools and equipment and painting equipment only. The Contractor shall not impose any greater loads upon the catwalk than intended by the catwalk design.

Attention is directed to Section 7-1.11, "Preservation of Property," of the Standard Specifications.

The State owned traveling scaffolds and traveling scaffold rails will not be available for the Contractor's use.

5-1.33 LOADS ON STRUCTURES

No lines for anchoring equipment shall be attached to the existing structure and pier fenders except with prior written approval the Engineer of the proposed methods of securing barges and other equipment. The Contractor shall submit working drawings for proposed method of securing barges and other equipment to the Engineer for his review and approval. Working drawings shall be approved by the Engineer before any work involving such drawings is performed. Such approval, if granted, shall in no way relieve the Contractor of his responsibility for preservation of property under Section 7-1.11, "Preservation of Property," of the Standard Specifications.

5-1.34 CONTAMINATED AND HAZARDOUS MATERIAL, GENERAL

Attention is directed to "Earthwork" of these special provisions regarding the removal and disposal of contaminated and hazardous material.

Contaminated and hazardous material have been discovered through testing within the project limits. Site investigation reports are available for inspection at the Department of Transportation, Toll Bridge Duty Senior's Office, 111 Grand Avenue, Oakland, California, (510) 286-5549. Requests to review the reports must be made with the duty senior at least 24 hours in advance. The levels of material designated as hazardous may be regulated under the Resource Conservation and Recovery Act (RCRA). The levels of hydrocarbon contamination are considered to be designated waste as defined by State of California regulations.

Hazardous materials shall be transferred directly from the excavation to a registered transport vehicle, a storage container approved for transport of hazardous waste by the United States Department of Transportation, or a stockpile location approved by the Engineer. Contaminated materials shall be transferred directly from the excavation to a transport vehicle, a storage container, or a stockpile location approved by the Engineer. Stockpile locations shall be maintained in accordance with the following requirements:

The material shall not contain free liquids that separate readily from the material. The presence or absence of free liquids shall be demonstrated by United States Environmental Protection Agency Method 9095 as modified by Section 66264.314 of Title 22 of the California Code of Regulations (CCR). Fluids removed from the stockpile area shall be contained and analyzed for proper identification of constituents prior to both treatment and disposal. Removal, disposal, treatment, and analysis of the fluids shall be performed at the Contractor's expense.

The material shall be stored on undamaged 60-mil high density polyethylene or an equivalent impermeable barrier unless the stockpiling location is on a paved surface. If the location is on a paved surface the thickness of the barrier can be reduced to 20-mil high density polyethylene or its equivalent. The dimensions of the barrier shall exceed the dimensions of the stockpile at all times. Any seams in the barrier shall be sealed to prevent leakage.

At the end of each day, the material shall be covered with undamaged 12-mil polyethylene or an equivalent impermeable barrier to prevent windblown dispersion and precipitation run-off and run-on. When more than one sheet is required to cover the material, the sheets shall be overlapped a minimum of 1.5 feet in a manner that prevents water from flowing onto the material. The cover shall be secured in a manner that keeps it in place at all times. Driven anchors shall not be used except at the perimeter of the stockpile. The cover shall be inspected at the end of each work day and its integrity maintained in accordance with the requirements of these special provisions.

Stockpile requirements apply to all temporary storage of hazardous material outside of an excavation or a transport container including, but not limited to, staging of excavated material next to the excavation prior to pick up by loading equipment, accumulating material for full transport loads, and awaiting test results required by a disposal facility. The removal of stockpiles shall begin within 30 days of accumulating 100 kg (220 lbs) of hazardous material. After final removal has occurred the Contractor shall be responsible for any cleanup deemed necessary by the Engineer.

All contaminated material and hazardous material on exteriors of transport vehicles shall be removed and placed either into the current transport vehicle, a designated stockpile of similar material, or the excavation of origin prior to the vehicle leaving the exclusion zone. No contaminated material or hazardous material shall be deposited on public roads. The Contractor shall indemnify the State from any costs due to spillage during the transport of the contaminated or hazardous material to the disposal facility.

The Contractor shall monitor the air quality continuously during excavation operations at all locations containing hazardous material.

Disposal of additional material resulting from the Contractor's option to slope the excavations in lieu of shoring at locations where this is possible or any excavation operations outside structure excavation pay limits will be at the Contractor's expense. This resultant material shall be treated as either contaminated material or hazardous material as indicated within the tables presented within "Contaminated and Hazardous Material Excavation" of these special provisions.

APPLICABLE RULES AND REGULATIONS.--Excavation, transport and disposal of contaminated material and hazardous material shall be in accordance with the rules and regulations of the following agencies:

United States Department of Transportation (USDOT)
United States Environmental Protection Agency (USEPA)
California Environmental Protection Agency (CAL-EPA)
Department of Toxic Substance Control (DTSC)
Integrated Waste Management Board
Regional Water Quality Control Board, Region 2 (RWQCB)
State Air Resources Board
Bay Area Air Quality Management District (BAAQMD)
California Division of Occupational Safety and Health Administration (CAL-OSHA)

PERMITS AND LICENSES.--The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work, including registration for transporting vehicles carrying the contaminated material and the hazardous material. The California Environmental Quality Act (CEQA)of 1970 (Chapter 1433, Stats. 1970), as amended may be applicable to permits, licenses and authorizations which the Contractor shall obtain from all agencies in connection with performing the work of the contract. The Contractor shall comply with the provisions of said statutes in obtaining such permits, licenses and other authorizations.

The Engineer will obtain the Environmental Protection Agency Generator Identification No. and Board of Equalization Identification Number as the State is the Generator.

HEALTH, SAFETY AND WORK PLAN.--The Contractor shall prepare a detailed Health, Safety and Work Plan for all site personnel in accordance with the DTSC and CAL-OSHA regulations. The Health, Safety and Work Plan shall include a plot plan indicating the exclusion zones, contaminant reduction (decontamination zones) and support zones in accordance with California Code of Regulations (CCR), Title 8 , an air monitoring plan, site clean up procedures, and physical barrier; and shall be submitted at least 15 working days prior to beginning any excavation for review and acceptance by the Engineer. Prior to submittal, the Contractor shall have the Health, Safety and Work Plan approved by a Civil Engineer, registered in the State of California and by an Industrial Hygienist certified by the American Board of Industrial Hygiene.

SAFETY.--Prior to performing any work at the locations containing material classified as hazardous, all personnel, including State Personnel, shall complete a safety training program which meets 29 CFR 1910.120 and 8 CCR 5192 covering the potential hazards as identified. The training shall be provided by the Contractor. The Contractor shall provide a certification of completion of the Safety Training Program to all personnel. Any personal protective equipment required by the Contractor's Health, Safety and Work Plan for personnel working within the exclusion zone will be supplied to State personnel by the Contractor. The number of State personnel requiring the above mentioned safety training program and personal protective equipment will be 7.

The decontamination area shall be located outside of the exclusion zone. Water from decontamination procedures shall be collected and disposed of at an appropriate disposal site by the Contractor. Non-reusable protective equipment, once used by any personnel, including State personnel, shall be collected and disposed of at an appropriate disposal site by the Contractor. Temporary 6-foot chain link security fence shall be installed to surround and secure the exclusion zone.

SAMPLING AND ANALYSIS.--The Contractor shall test the material to be excavated at his own expense for any additional acceptance requirements put forth by the disposal facility. Sampling and analysis shall be performed using the sampling and analysis procedure required by the disposal facility.

The Contractor may perform additional tests on the material to be excavated at his option and expense for confirmation of the material classification as contaminated or hazardous. Sampling and analysis shall be the same or equivalent tests as those described in the site investigation reports. The Contractor shall submit for approval by the Engineer, his sampling and analysis procedure and the name and address of the laboratory to be used fifteen working days prior to beginning any sampling or analysis. The laboratory used shall be certified by the California Department of Health Services.

MEASUREMENT AND PAYMENT. -- Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work affected by this section and no additional compensation will be allowed therefor.

5-1.35 COST REDUCTION INCENTIVE

Attention is directed to Section 5-1.14, "Cost Reduction Incentive," of the Standard Specifications and these special provisions.

Cost reduction proposals which require re-design or analysis by the Engineer, regarding structural design details specific to the bridge retrofit work, will not be considered.

Cost reduction proposals involving modifications to other work, or to any construction sequence shown on the plans or specified in the special provisions, which do not jeopardize the structural integrity of the bridge at any time or do not affect the retrofit design of the bridge, as determined by the Engineer, may be considered.

Prior to preparing a cost reduction proposal for other work or construction sequence, the Contractor shall request a meeting with the Engineer to discuss the proposal in concept and determine whether the cost reduction proposal will be considered. Items of discussion will also include permit issues, impact on other projects, impact on the project schedule, and review times required by the Department and other agencies.

5-1.36 ESCROW OF BID DOCUMENTATION

Bid documentation shall consist of all documentary and calculated information generated by the Contractor in preparation of the bid. The bid documentation shall conform to the requirements in these special provisions, and shall be submitted to the Department and held in escrow for the duration of the contract.

In the resolution of disputes involving the project, the escrowed bid documents will be the only documents accepted from the Contractor regarding preparation of the bid.

In signing the proposal, the bidder certifies that the material submitted for escrow constitutes all the documentary information used in preparation of the bid and that he has personally examined the contents of the container and that they are complete.

The bidder shall include with the proposal, the identification of the bidder's representative authorized to present the bid documentation and the persons responsible for preparing the bidder's estimate.

Nothing in the bid documentation shall be construed to change or modify the terms or conditions of the contract.

Escrowed bid documentation will not be used for pre-award evaluation of the Contractor's anticipated methods of construction, nor to assess the Contractor's qualifications for performing the work.

Bid documentation shall clearly itemize the Contractor's estimated costs of performing the work. The documentation submitted shall be complete and so detailed as to allow for an in-depth analysis of the Contractor's estimate.

The bid documentation shall include, but not be limited to: quantity takeoffs; rate schedules for the direct costs and the time- and nontime-related indirect costs for labor (by craft), plant and equipment ownership and operation, permanent and expendable materials, insurance and subcontracted work; estimated construction schedules, including sequence and duration and development of production rates; quotations from subcontractors and suppliers; estimates of field and home office overhead; contingency and margin for each contract item of work; and other reports, calculations and information used by the bidder to arrive at the estimate submitted with the proposal.

The Contractor shall also submit bid documentation for each subcontractor whose total subcontract exceeds $250,000. Subcontractor bid documentation shall be enclosed with the Contractor's submittal. The examination of subcontractors' bid documentation will be accomplished in the same manner as for the Contractor's bid documentation. If a subcontractor is replaced, bid documentation for the new subcontractor shall be submitted for review and escrow before authorization for the substitution will be granted. Upon request of a subcontractor, the bid documentation from that subcontractor shall be reviewed only by the subcontractor and the Department.

If the bidder is a joint venture, the bid documentation shall include the joint venture agreement, the joint venture estimate comparison and final reconciliation of the joint venture estimate.

Eight steel girder approach spans totaling approximately 1320 feet long with a width of approximately 77 feet. Retrofit includes modification of support piers and foundations, bearing replacement, and other structural modifications.

SECTION 10. CONSTRUCTION DETAILS

SECTION 10-1. GENERAL

10-1.01 ORDER OF WORK

Order of work shall conform to the provisions in Section 5-1.05, "Order of Work," of the Standard Specifications and these special provisions.

Attention is directed to “Portable Changeable Message Signs” and “Maintaining Traffic” of these special provisions and to the stage construction sheets of the plans.

A portable changeable message sign shall be placed in advance of the location of the beginning of each traffic control system for lane closure on the freeway. The sign shall be in place and in operation before any other component of the traffic control system is placed and shall remain in operation until all other components of the traffic control system are removed.

The work shall be performed in conformance with the stages of construction shown on the plans. Nonconflicting work in subsequent stages may proceed concurrently with work in preceding stages, provided satisfactory progress is maintained in said preceding stages of construction.

In each stage, after completion of the preceding stage, the first order of work shall be the removal of existing pavement delineation as directed by the Engineer. Pavement delineation removal shall be coordinated with new delineation so that lane lines are provided at all times on traveled ways open to public traffic.

Attention is directed to “Cooperation” of these special provisions. The outer lanes as shown in Stages 6A and 6B will not be available to truck traffic until the completion of Contract No. 04-046224, scheduled for February 28, 1998.

Attention is directed to "Environmentally Sensitive Area" elsewhere in these special provisions regarding various types of work restrictions related to environmental issues.

Before obliterating any pavement delineation that is to be replaced on the same alignment and location, as determined by the Engineer, such pavement delineation shall be referenced by the Contractor, with a sufficient number of control points to reestablish the alignment and location of the new pavement delineation. The references shall also include the limits or changes in striping pattern, including one- and two-way barrier lines, and other pavement markings. Full compensation for referencing pavement delineation shall be considered as included in the contract prices paid for new pavement delineation and no additional compensation will be allowed therefor.

Where existing detectors are to be abandoned and replaced, the new detectors or an approved temporary means of detection shall be in operation prior to abandoning the existing loop detectors. Temporary railing (Type K) shall be in place at locations shown on the plans prior to starting any adjacent construction activities.

Attention is directed to "Seismic Isolator Bearings" of these special provisions. Placing the order for seismic isolator bearings shall be a first order of work.

All work designated on the plans as footing retrofit, abutment retrofit, and pier retrofit shall be completed, and all associated new concrete shall have attained 100 percent of its specified strength prior to beginning bearing replacement. Of said designated work, the following additional requirements apply:

Work at Piers 17L and 17R shall be constructed diligently to completion, without delay. All work shall be completed at one pier before beginning work at the other. Work on the second pier shall not begin until all new concrete at the first pier has attained 100 percent of its specified strength.

Foundation retrofit at Pier 18 shall be constructed diligently to completion, without delay. The removal of existing pile cap concrete at Pier 18 for Stage 2 construction, as shown on the plans, shall not begin until all new footing concrete for Stage 1 construction has attained 100 percent of its specified strength.

The sequence of cast-in-drilled-hole concrete piling construction shall be such that at no time will any two adjacent holes be open.

Bearing replacement shall be performed at only one pier or abutment at a time within the limits from Abutment 1 to Pier 3, inclusive, and from Pier 13 to Abutment 19, inclusive. All such work at a pier or abutment shall be complete before beginning similar work at adjacent piers or abutments.

All bearing replacement work shall be completed at an abutment prior to beginning construction of the steel expansion joint assembly at said abutment .

All bearing replacement work shall be completed prior to beginning installation of girder splice plates and prior to beginning work designated on the plans as end diaphragm retrofit.

All work designated on the plans as end diaphragm retrofit shall be performed at only one pier, abutment, or hinge at a time within the limits from Abutment 1 to Pier 3, inclusive, and from Pier 13 to Abutment 19, inclusive. All such work at a pier, abutment, or hinge shall be complete before beginning similar work at adjacent piers, abutments, or hinge.

Structural steel members shown on the plans to be replaced shall be reconstructed one at a time. Structural steel members shown on the plans to be relocated, shall be relocated one at a time. Removal operations involved in reconstructing and relocating structural steel members

10-1.03 NON-STORM WATER DISCHARGES

Non-storm water discharges shall conform to the requirements in Section 7-1.01G, "Water Pollution" of the Standard Specifications and these special provisions.

Conformance with the requirements of this section shall in no way relieve the Contractor from the Contractor's responsibilities, as provided in Section 7-1.11, "Preservation of Property," and Section 7-1.12, "Responsibility for Damage," of the Standard Specifications.

Pile & Excavation Dewater.-- The Contractor shall provide a sealed excavation and prevent the flow of ground water, surface runoff, and tidal flow from entering any excavation including, but not limited to, footing excavations, and excavations for storm drainage systems and their appurtenances. Well points and continuous pumping of excavations for dewatering purposes are not allowed. The Contractor may dewater an initial volume of water equivalent to the structure excavation pay limits for a particular excavation. The maximum seepage rate of the sealed excavation, after initial dewatering is complete, shall not exceed five gallons per square yard of the excavation area per eight hour period. The excavation area shall be measured at the top of the excavation as seen in plan view. A meter that has been approved by the Engineer shall be used to measure all excavation discharges.

The Contractor shall submit to the Engineer , as provided in Section 5-1.02, “Plans and Working Drawings,” of the Standard Specifications, a plan which details the methods and measures that will be used to seal the sides and bottom of excavations, prevent the flow of water into excavations, and control seepage within the specified maximum seepage rate. The time to be provided for the Engineer’s review and approval of the plan shall be two weeks prior to beginning excavation operations.

If the initial dewatering volume exceeds the volume of the structure excavation pay limits or the seepage rate exceeds the specified maximum rate, then the Contractor shall immediately stop all work within the excavation not related to the control of water and submit a plan of corrective measures. The Contractor may not resume operations in that excavation until the plan is approved by the Engineer.

In the event that dewatering of the excavation or piles is required, the Contractor shall provide an amendment to the Storm Water Pollution Prevention Plan (SWPPP), as specified in “Water Pollution Control” of these special provisions. The amendment to the SWPPP shall contain a detailed description of the dewatering operations. A graphic for the dewatering operation shall show both a sectional and plan view that details the removal techniques for suspended solids and other constituents of concern. The graphic shall define the flow path and placement of pipes, hoses, pumps, and other equipment used to convey the discharge. In addition, the contractor shall provide a sketch that depicts the general position of the dewatering measures relative to the pile(s) or excavations undergoing dewatering and the point of effluent discharge.

The written descriptions of the dewatering operation shall include, but not be limited to, an estimate of the discharge volume, flow rate, and frequency; location of discharge; and the inspection and monitoring procedures related to the discharge.

Suspended solids shall be removed during the dewatering operation, as specified in these special provisions.

Suspended solids shall be removed to the extent that visible, floating products are not apparent within the discharge. Also, the discharge shall be of a purity such that turbidity and apparent color beyond present natural background levels are not apparent within the receiving water body. The turbidity, measured in Nephelometric Turbidity Units (NTU), of the discharge shall not be greater than a 10 percent increase of the background turbidity. The point of effluent discharge shall not cause bottom sediments, aquatic vegetation, or surface soils to become dislodged or disturbed.

The Contractor shall conduct a daily inspection of the dewatering equipment, when in use, to ensure that all components are functional and routinely maintained to prevent leakage prior to removal of suspended solids. Any component of the apparatus that is found to be damaged or to affect the performance of the apparatus shall be either immediately repaired or replaced.

The Contractor shall monitor both the discharge and the receiving water body. The observations made during monitoring shall include the color, size of affected area, presence of suspended material, presence of water fowl or aquatic wildlife, wind direction and velocity, tidal condition, atmospheric condition, time, date, and a turbidity measurement in NTU. In addition, the Contractor shall supplement the observations with photographs. The contractor shall conduct monitoring, at a minimum, one hour prior to discharge, during the first ten minutes of initiating discharge, every four hours during discharge, and upon cessation of discharge. The observations shall be recorded daily in a tabular format known as the monitoring report to be provided by the Engineer. The monitoring report, including photographs, shall be provided weekly to the Engineer, or as directed by the Engineer.

Observations which indicate that the discharge is of a visible purity such that turbidity and apparent color are beyond the present natural background levels shall be immediately reported to the Engineer. The discharge activity shall immediately cease, so that corrective actions are undertaken to repair, modify, or replace the equipment. The commencement of discharge activities shall be allowed upon approval by the Engineer.

All water removed from excavations shall be handled in accordance with National Pollutant Discharge Elimination System (NPDES) Permit CAS029998 issued by the San Francisco Bay Regional Water Board. Copies of the permit are available and its amendments are available for inspection and purchase at the Department of Transportation, Toll Bridge Duty Senior's Desk, 111 Grand Avenue, Oakland, California, (510) 286-5549. Penalties assessed against the State for permit non-compliance by the Contractor will be borne by the contractor. Such penalties will be deducted from the monthly progress payment.

Slurries, Liquids, Residues and Debris.-- The control and disposal of slurries, liquids, residues, and debris associated with "Remove Pavement Markers," "Remove Painted Traffic Stripes and Pavement Markings," "Asphaltic Plug Joint Seal," "Piling" "Clean and Paint Structural Steel," and "8 inch City of Benicia Water Main" shall be described within the SWPPP, as specified in "Water Pollution Control" of these special provisions. The SWPPP shall, at a minimum, depict and describe the procedural and structural methods of detaining, collecting, and disposing of all slurries, liquids, residues, and debris associated with the operations. Sufficient redundancy shall be incorporated into the procedural and structural methods such that the liquids, residues, and debris are not conveyed into or become present in drainage systems, Carquinez Strait, or Suisun Bay.

Concrete and Wastes.-- Attention is directed to "Concrete," "Bridge Removal," "Temporary Deck Bridging," "Remove Concrete," "Piling," Prestressing Concrete," "Tiedown Anchors," "Concrete Structures," "Non-Shrink Grout," "Expansion Joint Assemblies," "Structure Approach Slabs," "Drill and Bond Dowel (Epoxy Cartridge)," "Drill and Bond Dowels," "Core Concrete," and "Core Concrete and Pressure Grout" elsewhere in these special provisions. The control and disposal of water, abrasives, and residues associated with concrete wastes, including grout and epoxy, shall be described within the SWPPP, as specified in "Water Pollution Control" of these special provisions. The SWPPP shall, at a minimum, depict and describe the procedural and structural methods of detaining, collecting, and disposing of all concrete wastes. Sufficient redundancy shall be incorporated into the procedural and structural methods, such that concrete wastes are not conveyed into or become present in drainage systems, Carquinez Strait, or Suisun Bay.

Measurement and Payment.-- Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work affected by this section and no additional compensation will be allowed therefor.

10-1.04 ELECTRONIC MOBILE DAILY DIARY COMPUTER SYSTEM

The Contractor shall provide for the State's exclusive possession and use a complete electronic mobile daily diary computer system, to allow State personnel to record observation (diary) data in the field using Personal Digital Assistants (PDAs), and in the office using desktop workstation(s). Recorded data will be uploaded to a database maintained on an Oracle server. Diary information in the database shall be capable of being edited and printed in the form of an Engineer's Daily Report from desktop workstations connected to the database via a local area network. The system shall also provide other reports required by the Engineer, as well as user friendly and rapid retrieval of daily reports and other information from the database for research purposes.

The Engineer may use the furnished computer hardware, software, and instruction manual for any purposes related to the subject project. Before delivery and set up of the computer system the Contractor shall submit to the Engineer for approval a detailed list of all computer hardware and software the Contractor proposes to furnish. All computer hardware and software furnished shall remain the property of the Contractor and shall be removed by the Contractor upon acceptance of the contract when no claims are pending and after the final estimate has been submitted to the Contractor.

The electronic mobile daily diary computer system furnished shall meet the requirements described below for function, data, hardware, and support.

FUNCTIONAL REQUIREMENTS.--The Contractor shall provide, not later than 11 days after contract award, a computer system that complies with the following minimum functional specifications:

DATA COLLECTION SUBSYSTEM.--

1. Accept input of observation data.

General Data.--Allow input of data that applies to all observation data sets:

- Inspector ID: agency-specific code; allow up to 10 alphanumeric characters.
- Inspector password: general text field; allow up to 10 characters.
- Inspector name: general text field; allow up to 30 characters.
- Inspector title: general text field; allow up to 30 characters.

Concrete removed shall be disposed of outside the highway right of way in accordance with the provisions in Section 7-1.13 of the Standard Specifications.

10-1.21 CLEARING AND GRUBBING

Clearing and grubbing shall conform to the provisions in Section 16, "Clearing and Grubbing," of the Standard Specifications and these special provisions.

At column, bent, footing and abutment locations, vegetation shall be cleared and grubbed only within the excavation lines. The Contractor shall make a reasonable effort to separate soil from vegetation, and the soils will remain on the site.

All activities controlled by the Contractor, except cleanup or other required work, shall be confined within the graded areas of the roadway.

10-1.22 EARTHWORK

Earthwork shall conform to the provisions in Section 19, "Earthwork," of the Standard Specifications and these special provisions.

Material from dredging operations furnished for this project may be used if the dredging was performed under permit from the Bay Conservation and Development Commission (BCDC, a lead agency for SMARA in the San Francisco bay area), and the permit number and parcel number of the source of material are provided to the Engineer on the HC-30 “Notice of Materials to be used”.

The second sentence in the third paragraph of Section 19-1.02, "Preservation of Property," of the Standard Specifications is amended to read:

Such plans shall be submitted at least 12 weeks before the Contractor intends to begin excavation requiring said shoring.

If structure excavation or structure backfill involved in bridges is not otherwise designated by type, and payment for such structure excavation or structure backfill has not otherwise been provided for in the Standard Specifications or these special provisions, such structure excavation or structure backfill shall conform to these special provisions as directed by the Engineer and will be paid for at the contract price per cubic yard for structure excavation (bridge/contaminated), (Type H), or (Type D/contaminated) and structure backfill (bridge) according to such direction.

Structure excavation (bridge) as shown on the plans includes structure excavation (bridge/contaminated) and structure excavation (Type H) as provided for in these special provisions. Structure excavation, designated as (bridge/contaminated), (Type H), and (Type D/contaminated), for footings at the locations shown on the plans and as further defined in these special provisions will be measured and paid for as structure excavation (bridge/contaminated), (Type H), and (Type D/contaminated). Ground water or surface water is expected to be encountered at these locations, but seal course concrete is not shown or specified. Structure excavation for footings at locations not designated on the plans as structure excavation (bridge/contaminated), (Type H), and (Type D/contaminated), and where ground or surface water is encountered will be measured and paid for as directed by the Engineer.

10-1.22A CONTAMINATED AND HAZARDOUS MATERIAL EXCAVATION.

All contaminated and hazardous material to be excavated as shown on the plans and described in these special provisions shall be transported to a disposal facility permitted to accept such material.

Attention is directed to "Contaminated and Hazardous Material, General" elsewhere in these special provisions.

The following table that summarizes the vertical extent, degree and type of constituents of concern in the areas to be excavated.

Abutment 1

Zone (b.g.s.)	Sample Depth (b.g.s.)	Sample I.D.	Lead TTLC (mg/Kg)	Lead STLC (mg/L)	Classification
0 to 5 feet	1 foot	B7*	34		Contaminated
		B7 Dup.*	34		
		B8*	40		
	3 feet	B7*	2.7		
		B8*	40		
	5 feet	B7*	3		
		B8*	8.2		

Pier 2

Zone (b.g.s.)	Sample Depth (b.g.s.)	Sample I.D.	Lead TTLC (mg/Kg)	Lead STLC (mg/L)	Lead TCLP (mg/L)	Classification
0 to 7 feet	Surface	B14	55	0.46	<0.15	Contaminated
		B15	48			
		B16	87	0.95	<0.15	
		B16A	62	1.3	<0.15	
		B20	55	0.70	<0.15	
		B21	6.7			
		B22	7.2			
	1 foot	B14	16			
		B15	142	2.1	<0.15	
		B16	148	4.6	<0.15	
		B16A	106	1.2	<0.15	
		B20	32			
		B21	12			
		B22	9.3			
		B9*	66	4.0		
	2 feet	B14	24			
		B15	52	0.56	<0.15	
		B16	46	0.59	<0.15	
		B16A	202	0.75		
		B20	17			
		B21	9			
		B22	6.4			
	3 feet	B14	26			
		B15	31			
		B16	35			
		B16A	85	<0.15	<0.15	
		B20	139	0.25	<0.15	
		B22	64	0.38	<0.15	
		B9*	26			
	4 feet	B20	34			
	5 feet	B14	22			
		B15	24			
		B16A	76	0.35	<0.15	
	7 feet	B16A	92	<0.15	<0.15	

Pier 14

Zone (b.g.s.)	Sample Depth (b.g.s.)	Sample I.D.	Lead TTLC (mg/Kg)	Lead STLC (mg/L)	Lead TCLP (mg/L)	TPH Diesel (mg/Kg)	Classification
0 to 5 feet	Surface	B1	24				Hazardous (Type H)
		B2	108		<0.15		
		B3	64	2.5	0.21		
	1 foot	B1 *	25			13	
		B1	44				
		B2	43				
		B3	72	2.9	<0.15		
	2 feet	B1	42				
		B2	91	3.8	<0.15		
		B3	43				
	3 feet	B1*	31			67	
		B1	43				
		B2	570	192	5.9		
		B3	52	0.63	<0.15		
5 to 12 feet	5 feet	B1*	14			3.5	Contaminated
		B1	35				
		B2	32				
		B3	27				
	10 feet	B1*	<0.25			12	
		B1	40				
		B2	45				
		B3	27				
	12 feet	B1	36				
		B2	36				

Pier 15

Zone (b.g.s.)	Sample Depth (b.g.s.)	Sample I.D.	Lead TTLC (mg/Kg)	Lead STLC (mg/L)	Lead TCLP (mg/L)	TPH Diesel (mg/Kg)	Classification
0 to 15 feet	Surface	B4	91	3.2	<0.15		Hazardous (Type H)
		B5	91	2.5	<0.15		
		B17	318	13	0.21		
	1 foot	B2*	11			5.1	
		B4	94	5.1	<0.15		
		B5	55	2.3	<0.15		
		B17	660	11	<0.15		
	2 feet	B4	98	2.0	<0.15		
		B5	21				
		B17	266	16	<0.15		
	3 feet	B2*	27			3.6	
		B4	138	25	0.25		
		B5	32				
		B17	460	18	1.1		
	5 feet	B2*	7.9			4.4	
		B5	28				
		B17	788	130	0.70		
	10 feet	B2*	17			3.4	
		B5	41				
	13 feet	B5	32				
	15 feet	B2*	7.2			4.3	
		B4	40				

Pier 16

Zone (b.g.s.)	Sample Depth (b.g.s.)	Sample I.D.	Lead TTLC (mg/Kg)	Lead STLC (mg/L)	Lead TCLP (mg/L)	TPH Diesel (mg/Kg)	Classification
0 to 5 feet	Surface	B6	61	0.56	<0.15		Hazardous (Type H)
		B7	32				
		B8	48				
	1 foot	B3*	16			5.6	
		B3* Dup.	23				
		B6	211	0.68	<0.15		
		B7	21				
		B8	18				
	2 feet	B6	234	13	<0.15		
		B7	45				
		B8	74	4.4	<0.15		
	3 feet	B3*	93	8.3		5.8	
		B6	53	1.1	<0.15		
		B7	27				
		B8	62	1.0	<0.15		
5 to 15 feet	5 feet	B3*	7			7.4	Contaminated
		B6	28				
		B7	27				
		B8	48				
	8 feet	B8	30				
	10 feet	B3*	6.1			5.2	
		B6	28				
		B7	27			1170	
	12 feet	B3*	5.8			3.8	
	15 feet	B6	26				
		B7	39			572	

Pier 18

Zone (b.g.s.)	Sample Depth (b.g.s.)	Sample I.D.	Lead TTLC (mg/Kg)	Lead STLC (mg/L)	Lead TLCP (mg/L)	TPH Diesel (mg/Kg)	Classification
0 to 5 feet	Surface	B9	30				Hazardous (Type H)
		B10	76	6.5	0.17		
		B11	20				
	1 foot	B4*	18			25	
		B9	31				
		B10	78	12	<0.15		
		B11	17				
	2 feet	B9	24				
		B10	10				
		B11	206	4.4	<0.15		
	3 feet	B4*	3.6			35	
		B9	35				
		B10	28				
		B11	265	18	<0.15		
5 to 7 feet	5 feet	B4*	6.2			17	Contaminated
		B9	36				
		B10A	20				
		B11	14				
	7 feet	B4*	4.5			64	
		B9	26				
		B10	26				
		B11	25				

Abutment 19

Zone (b.g.s.)	Sample Depth (b.g.s.)	Sample I.D.	Lead TTLC (mg/Kg)	Lead STLC (mg/L)	Lead TCLP (mg/L)	TPH Diesel (mg/Kg)	Classification
0 to 2 feet	Surface	B12	32				Hazardous (Type H)
		B13	37				
		B18	82	5.4	0.17		
		B19	74	5.1	<0.15		
	1 foot	B5*	3580			60	
		B6*	85	4.4		16	
		B12	101	3.8	<0.15		
		B13	54	1.1	0.17		
		B18	45				
		B19	16				
2 to 9 feet	2 feet	B12	64	0.77	<0.15		Contaminated
		B13	89	3.9	<0.15		
		B18	114	1.1	<0.15		
		B19	14				
	3 feet	B5*	8.3			46	
		B5* Dup.	8.3				
		B6*	5.4			12	
		B12	36				
		B13	59	2.6	<0.15		
		B18	38				
		B19	15				
	5 feet	B5*	16			15	
		B6*	5.2			12	
		B12	49				
		B13	30				
		B18	32				
		B19	5.6				
	8 feet	B13	8.1				
	9 feet	B12	23				

Key: TTLC - Total Threshold Limit Concentration
STLC - Soluble Threshold Limit Concentration
Dup. - Duplicate
* - Sample a result of the November 1996 Site Investigation, all other samples a result of August 1997 Investigation
TPH Diesel - Total Petroleum Hydrocarbons as Diesel
TCLP - Total Characteristic Leaching Procedure
b.g.s. - below ground surface

Upon completion of hazardous material excavation, temporary chain link security fence and personal protective equipment, when no longer required as determined by the Engineer, shall be removed from the job site.

The Contractor shall implement a plan to prevent exposure of personnel working in hazardous material excavations. The Contractor's plan to prevent exposure of personnel shall consist of a physical barrier. The barrier shall be maintained by the Contractor. When no longer required, as determined by the Engineer, the physical barrier shall be removed and either decontaminated or disposed of by the Contractor. The Contractor shall prevent the flow of surface water and ground water from entering any excavation in accordance with “Non-Storm Water Discharges” of these special provisions.

MEASUREMENT AND PAYMENT.--Full compensation for loading, transporting, and disposing of contaminated and hazardous material, and furnishing, installing and removing physical barriers shall be considered as included in the contract price paid per cubic yard for structure excavation of the types designated in the Engineer's Estimate and no additional compensation will be allowed therefor.

10-1.23 ASPHALT CONCRETE

Asphalt concrete shall be Type B and shall conform to the provisions in Section 39, "Asphalt Concrete," of the Standard Specifications and these special provisions.

The aggregate for use in the asphalt concrete shall conform to the provisions in Section 39-2.02, "Aggregate," of the Standard Specifications, and the following:

The grading of the aggregate shall be 1/2 inch maximum, medium.

The grading of the aggregate in sections or tapers at bridge ends, less than one inch in total depth, may be No. 4 maximum, subject to the approval of the Engineer.

ENGINEER'S ESTIMATE

04-044024

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
1	046327	TEMPORARY DECK BRIDGING	LS	LUMP SUM	LUMP SUM	
2	074019	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	LUMP SUM	LUMP SUM	
3	074020	WATER POLLUTION CONTROL	LS	LUMP SUM	LUMP SUM	
4 (S)	120090	CONSTRUCTION AREA SIGNS	LS	LUMP SUM	LUMP SUM	
5 (S)	120100	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM	LUMP SUM	
6	120159	TEMPORARY TRAFFIC STRIPE (PAINT)	LF	13,400		
7	120300	TEMPORARY PAVEMENT MARKER	EA	770		
8	010221	TEMPORARY TERMINAL SECTION (TYPE K)	EA	12		
9	128650	PORTABLE CHANGEABLE MESSAGE SIGN	EA	3		
10	129000	TEMPORARY RAILING (TYPE K)	LF	9,740		
11	129150	TEMPORARY TRAFFIC SCREEN	LF	9,740		
12	150711	REMOVE PAINTED TRAFFIC STRIPE	LF	7,920		
13	150712	REMOVE PAINTED PAVEMENT MARKING	SQFT	170		
14	150722	REMOVE PAVEMENT MARKER	EA	420		
15	153221	REMOVE CONCRETE BARRIER	LF	1,100		
16	046328	ACCESS OPENING	EA	2		
17	157560	BRIDGE REMOVAL (PORTION)	LS	LUMP SUM	LUMP SUM	
18	159101	RAISE BRIDGE	LS	LUMP SUM	LUMP SUM	
19 (F)	012060	STRUCTURE EXCAVATION (BRIDGE/CONTAMINATED)	CY	680		
20 (F)	012061	STRUCTURE EXCAVATION (TYPE D/CONTAMINATED)	CY	360		

REVISED PER ADDENDUM NO. 3 DATED DECEMBER 5, 1997

ENGINEER'S ESTIMATE

04-044024

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21 (F)	193003	STRUCTURE BACKFILL (BRIDGE)	CY	630		
22	390103	ASPHALT CONCRETE (TYPE B)	TON	800		
23	394002	PLACE ASPHALT CONCRETE (MISCELLANEOUS AREA)	SQYD	340		
24 (S)	490605	36" CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	810		
25 (S)	490616	84" CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	320		
26 (S)	500001	PRESTRESSING CAST-IN-PLACE CONCRETE	LS	LUMP SUM	LUMP SUM	
27 (S)	500060	TIEDOWN ANCHOR	EA	19		
28 (F)	510051	STRUCTURAL CONCRETE, BRIDGE FOOTING	CY	1,000		
29 (F)	510053	STRUCTURAL CONCRETE, BRIDGE	CY	1,300		
30 (F)	510080	STRUCTURAL CONCRETE, APPROACH SLAB	CY	90		
31	511106	DRILL AND BOND DOWEL	LF	11,440		
32	511109	DRILL AND BOND DOWEL (EPOXY CARTRIDGE)	EA	740		
33 (S)	046985	CORE CONCRETE (2") AND PRESSURE GROUT	LF	525		
34 (S)	046986	CORE CONCRETE (4") AND PRESSURE GROUT	LF	32		
35 (S)	515064	CORE CONCRETE (5")	LF	200		
36 (S)	046987	CORE CONCRETE (1 1/2") AND PRESSURE GROUT	LF	1,100		
37 (S)	046988	CORE CONCRETE (1 3/4") AND PRESSURE GROUT	LF	1,700		
38 (S)	515163	CORE CONCRETE (2 1/2")	LF	200		
39 (S)	046989	CORE CONCRETE (2 1/2") AND PRESSURE GROUT	LF	88		
40 (S)	046329	SEISMIC ISOLATOR BEARING (TYPE 1)	EA	44		

ENGINEER'S ESTIMATE

04-044024

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	010223	RELOCATE 8-INCH CITY OF BENICIA WATER MAIN	LS	LUMP SUM	LUMP SUM	
62	011835	TIME RELATED OVERHEAD	WDAY	315		
63	010953	ELECTRONIC MOBILE DAILY DIARY COMPUTER SYSTEM	LS	LUMP SUM	LUMP SUM	
64	010954	ELECTRONIC MOBILE DAILY DIARY SYSTEM DATA DELIVERY	LS	LUMP SUM	LUMP SUM	
65	070010	PROGRESS SCHEDULE (CRITICAL PATH)	LS	LUMP SUM	LUMP SUM	
66	192023	STRUCTURE EXCAVATION (TYPE H)	CY	730		
67	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

TOTAL BID: _____

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY PETE WILSON, Governor
DEPARTMENT OF TRANSPORTATION
ESC/OE MS#43
P.O. Box 942874
SACRAMENTO, CA 94274-0001

TDD (916) 654-4014

November 24, 1997

04-CC,Sol-680,780-Var
04-044024

Addendum No. 2

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in CONTRA COSTA AND SOLANO COUNTIES IN BENICIA AND MARTINEZ FROM 0.6 MILE NORTH OF MOCOCO OVERHEAD TO 0.1 MILE NORTH OF BENICIA-MARTINEZ BRIDGE AND OVERHEAD TOLL PLAZA.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on December 16, 1997, instead of the current date of December 2, 1997.

This addendum is being issued to set a new bid opening date as shown herein and revise the Project Plans.

Project Plan Sheet 129 is revised. A half-sized copy of the revised sheet is attached for substitution for the like numbered sheet.

Project Plan Sheet 116 is revised as follows:

In the upper right "Partial Plan" and in the two lower partial plans, the following note is added:

"(Left side of bridge shown, right side opposite hand)."

To Proposal and Contract book holders:

INDICATE RECEIPT OF THIS ADDENDUM BY FILLING IN THE NUMBER OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE SIGNATURE PAGE OF THE PROPOSAL.

Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

NICK YAMBAO, Chief
Plans, Specifications &
Estimates Branch
Office of Office Engineer

Attachment

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY PETE WILSON, Governor
DEPARTMENT OF TRANSPORTATION
ESC/OE MS#43
P.O. Box 942874
SACRAMENTO, CA 94274-0001

TDD (916) 654-4014

November 7, 1997

04-CC,Sol-680,780-Var
04-044024

Addendum No. 1

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in CONTRA COSTA AND SOLANO COUNTIES IN BENICIA AND MARTINEZ FROM 0.6 MILE NORTH OF MOCOCO OVERHEAD TO 0.1 MILE NORTH OF BENICIA-MARTINEZ BRIDGE AND OVERHEAD TOLL PLAZA.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on December 2, 1997 instead of the original date of November 18, 1997.

This addendum is being issued to set a new bid opening date as shown herein and revise the Project Plans, the Notice to Contractors and Special Provisions, and the Engineer's Estimate.

Project Plan Sheets 15, 16, 70, 108 and 126 are revised. Half-sized copies of the revised sheets are attached for substitution for the like numbered sheets.

Project Plan Sheets are revised as follows:

SHEET N0.	REVISION
50	In the "Quantities" Table, the quantities for "Seismic Isolator Bearing (Type 1)" and "Seismic Isolator Bearing (Type 2)" are revised to "44" and "24" respectively.
60	In "Section E-E," in the upper right corner, 3" AC is revised to 2" AC.
93	In the "Isolator Bearing Performance Criteria Table", in the last 3 columns, in the last 4 rows, each "±" is deleted. In addition, in the last column, in the fourth row, "234 kips" is revised to "274 kips."
99	In "Section A-A", at the bottom left and bottom right, "1'-6"±" is revised to "1'-0"±" (2 places).
100	In the "Elevation" on the left side and in "Section A-A" at the lower right, "Type 1 Isolator Bearings" is revised to "Type 2 Isolator Bearings" (2 places).
118	In the "Plan", the note, "(Center line symbol) Brg (parallel to longitudinal girder)" is deleted.

In the Notice to Contractors and Special Provisions Book, the following is added after the first special notice:

"Tidal conditions may present significant problems in constructing the work as depicted in the contract plans. Tidal fluctuations may be severe and different from those shown in published tidal and current data due to differences in datum, winter runoff and other causes. Strong currents exist over portions of the project site. Limited time periods of slack water may restrict diving and other underwater activities.

The Contractor is responsible for being knowledgeable of such tidal difficulties, and no payment will be made by the State for any costs incurred by the Contractor in connection with the variations in actual tidal or current conditions during the course of this contract. Any reference to Mean Higher High and Mean Lower Low tides shall be understood to be an estimate used for permit purposes, actual mean tide data shall be determined by the Contractor. All vertical control datum is based on the National Geodetic Vertical Datum of 1929."

In the Special Provisions, in Section 2-1.02, "General", after the third paragraph, the following paragraph is added:

"Attention is directed to Section, "Escrow of Bid Documentation" elsewhere in these special provisions. Said section contains some conditions for acceptance of proposals."

In the Special Provisions, in Section 5-1.19, "Sound Control Requirements", the second sentence of the second paragraph is revised as follows:

"No pile driving operation, except when using vibratory hammers only, will be allowed between the hours of 7:00 p.m. and 8:00 a.m."

In the Special Provisions, in Section 10-1.08, "Progress Schedule (Critical Path)", in the sub-section, "Definitions", the following item is added:

"13) Current Contract Completion Date: The extended date for completion of the contract shown on the weekly statement of working days furnished by the Engineer in accordance with Section 8-1.06, "Time of Completion," of the Standard Specifications."

In the Special Provisions, in Section 10-1.20, "Existing Highway Facilities", the following is added after the third paragraph:

"Additional miscellaneous reports and documents, including but not limited to design and maintenance investigations, original and supplemental bridge reports, resident engineers reports, construction photographs, maintenance repairs, fender, traveler and barrier rail modifications, that may be reviewed and copied, are available at the Toll Bridge Seismic Retrofit Program Duty Senior's Desk, at 111 Grand Avenue, Oakland, California, (510) 286-5549."

In the Special Provisions, Pages 1, 25, 26 through 28, 41, 42, 43, 45 through 49, and 54 have been revised and pages 28A, 43A, 49A, 49B, 49C and 54A have been added as attached.

In the "Copy of Engineer's Estimate" in the NOTICE TO CONTRACTORS and the "Engineer's Estimate" in the PROPOSAL, Items 40, 41 and 65 is are revised, and Item 66 is added as attached.

To Proposal and Contract book holders:

REPLACE PAGES 4, 5 and 6 OF THE ENGINEER'S ESTIMATE IN THE PROPOSAL WITH THE ATTACHED REVISED PAGES 4, 5 and 6 OF THE ENGINEER'S ESTIMATE. THE REVISED ENGINEER'S ESTIMATE IS TO BE USED IN THE BID SUBMITTAL AND INSERTED IN THE PROPOSAL.

INDICATE RECEIPT OF THIS ADDENDUM BY FILLING IN THE NUMBER OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE SIGNATURE PAGE OF THE PROPOSAL.

Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

NICK YAMBAO, Chief
Plans, Specifications &
Estimates Branch
Office of Office Engineer

Attachments

DEPARTMENT OF TRANSPORTATION

NOTICE TO CONTRACTORS

THIS IS AN INFORMAL BIDS CONTRACT

CONTRACT NO. 04-044024

04-CC,Sol-680,780-Var

Sealed proposals for the work shown on the plans entitled:

STATE OF CALIFORNIA; DEPARTMENT OF TRANSPORTATION; PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY IN CONTRA COSTA AND SOLANO COUNTIES IN BENICIA AND MARTINEZ FROM 0.6 MILE NORTH OF MOCOCO OVERHEAD TO 0.1 MILE NORTH OF BENICIA-MARTINEZ BRIDGE AND OVERHEAD TOLL PLAZA

will be received at the Department of Transportation, 1120 N Street, Room 0200, MS #26, Sacramento, California 95814, until 2 o'clock p.m. on November 18, 1997, at which time they will be publicly opened and read in Room 0100 at the same address.

Proposal forms for this work are included in a separate book entitled:

STATE OF CALIFORNIA; DEPARTMENT OF TRANSPORTATION; PROPOSAL AND CONTRACT FOR CONSTRUCTION ON STATE HIGHWAY IN CONTRA COSTA AND SOLANO COUNTIES IN BENICIA AND MARTINEZ FROM 0.6 MILE NORTH OF MOCOCO OVERHEAD TO 0.1 MILE NORTH OF BENICIA-MARTINEZ BRIDGE AND OVERHEAD TOLL PLAZA

General work description: TOLL BRIDGE Seismic Retrofit OF BENICIA-MARTINEZ BRIDGE.

This project has a combined goal of 23 percent minority business enterprise (MBE), women business enterprise (WBE) and disabled veteran business enterprise (DVBE) participation.

No pre-bid meeting is scheduled for this project.

Prospective bidders may make arrangements to visit the jobsite by contacting the Bridge Manager, Benicia - Martinez Bridge, at telephone (707) 648-4111.

Bidder inquiries may be made as follows:

For structures work: Structures PS&E Duty Senior, Specifications and Estimating Branch, telephone number (916) 227-8770.

For all other inquiries: Toll Bridge Retrofit Program Duty Senior at District 04 Office, 111 Grand Avenue, Oakland, California 94612; Fax Number (510) 286-4563, e-mail ybermude@trmx3.dot.ca.gov, telephone number (510) 286-5549.

Bidders will be requested to submit their inquiries in writing to the Oakland address, accompanied by an electronic copy where feasible, in order to avoid any misunderstandings. Written inquiries shall include the bidder's name, address and phone number. Written inquiries will be investigated and an addendum to the contract will be issued to the extent feasible and at the discretion of the Department. A copy of each addendum will also be posted on the Internet at http://tresc.dot.ca.gov/sfobb/bminquiry.html.

and other State-owned property shall be at the Contractor's own risk, and the State shall not be held liable for any damage to or loss of materials or equipment located within such areas.

The Contractor shall remove all equipment, materials, and rubbish from the work areas and other State-owned property which he occupies and shall leave the areas in a presentable condition, in conformance with the provisions in Section 4-1.02, "Final Cleaning Up," of the Standard Specifications.

The Contractor shall secure at his own expense any area required for storage of plant, equipment and materials, or for other purposes if sufficient area is not available to him within the contract limits.

5-1.26 UTILITIES

The Contractor shall make his own arrangements to obtain electrical power, water, or compressed air or other utilities required for his operations and shall make and maintain the necessary service connections at his own expense. The Contractor will not be permitted to use existing State utilities on the bridge or within the contract limits.

5-1.27 SANITARY PROVISIONS

State sanitary facilities will not be available for use by the Contractor's employees.

5-1.28 BRIDGE TOLLS

Toll-free passage on the Benicia-Martinez Bridge will be granted only for cars, trucks and special construction equipment which are clearly marked on the exterior with the Contractor's identification and which are being operated by the Contractor exclusively for the project and for the purpose of transporting materials and workmen directly to and from the jobsite.

The Contractor shall make application to the Engineer in advance for toll-free passage. The Contractor will be held accountable for the proper use of all passes issued, and upon completion of the work, shall return all unused passes.

Attention is directed to Section 23302, "Evasion of Toll," of the Vehicle Code.

5-1.29 ACCESS TO JOBSITE

Access to and from the north end of the jobsite through the City of Benicia shall be limited to the Bayshore Road Interchange off Route 680.

Access to all construction activities on the south side of the Carquinez Strait near Pier 13 shall be from the water (barge) or may be along and upon the existing private roadway belonging to TOSCO Corporation, leading from Marina Vista Road to and from the waterfront area.

ACCESS THROUGH TOSCO CORPORATION PROPERTY.--The Department has entered into a temporary access agreement with TOSCO Corporation. The Contractor shall fully inform himself of all conditions of the agreement and conduct his work accordingly.

A copy of the agreement may be obtained at the office of the Toll Bridge Seismic Program Duty Senior's Desk at 111 Grand Avenue, Oakland, California 94612-3717, Telephone No. (510) 286-5549.

As a condition for using said road, the Contractor shall modify the access road and replace the existing wooden bridge as directed by the Engineer.

Preparation of working drawings, modification of the existing road and replacement of the existing wooden bridge as required by the agreement will be paid for as extra work as provided in Section 4-l.03D of the Standard Specifications.

5-1.30 DRAWINGS

Attention is directed to Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications and these special provisions.

When working drawings are required by these special provisions, the drawings shall be submitted in accordance with the provisions in Section 55-1.02, "Drawings," of the Standard Specifications and the following:

1. Working drawings shall be submitted in accordance with Section 55, "Steel Structures" of the Standard Specifications.
2. Working drawings shall not exceed 22" x 34" in size.
3. Microfilms are required of all approved shop drawings and shall be only a 24x reduction.
4. Electronic files for all shop drawings on Microstation format or similar.

Working drawings will be required where specified elsewhere in these special provisions.

5-1.31 PERMITS AND LICENSES

Attention is directed to Section 7-1.04, "Permits and Licenses," of the Standard Specifications and these special provisions.

In addition to the permits described elsewhere in these special provisions, the Department has obtained the following rights of entry for this project:

Right-of-Entry into Benicia Industries, Inc.
Right-of-Entry into Union Pacific Railroad Company
Right-of-Entry into TOSCO Corporation

Copies of these rights of entry can be obtained at the Department of Transportation, Plans and Bid Documents, Room 0200, Transportation Building, 1120 N Street, P.O. Box 942874, Sacramento, California 94274-0001, Telephone No. (916) 654-4490, or may be seen at the office of the Toll Bridge Seismic Program Duty Senior's Desk at 111 Grand Avenue, Oakland, California 94612-3717, Telephone No. (510) 286-5549.

Full compensation for conforming to the requirements in these rights of entry shall be considered as included in the contract prices paid for the various items of work and no additional compensation will be allowed therefor.

5-1.32 STATE OWNED CATWALKS AND SCAFFOLDS

On the Benicia-Martinez Bridge, there are State owned catwalks that will be available for Contractor's use when not being used by the bridge paint and maintenance forces. Arrangements for their use shall be made to the Engineer and maintenance forces 7 calendar days in advance.

Attention is directed to "Cooperation" elsewhere in these special provisions.

One of the two existing catwalks at both ends of the bridge shall be available for use by State maintenance personnel and other contractors at all the times. The catwalks are not to be used for the storage of equipment and materials.

State maintenance personnel will instruct Contractor's personnel on how to use the catwalks. Thereafter, operation of the catwalks for contract work will be the responsibility of the Contractor.

The catwalks were designed to support maintenance personnel using small tools and equipment and painting equipment only. The Contractor shall not impose any greater loads upon the catwalk than intended by the catwalk design.

Attention is directed to Section 7-1.11, "Preservation of Property," of the Standard Specifications.

The State owned traveling scaffolds will not be available for the Contractor's use.

5-1.33 LOADS ON STRUCTURES

No lines for anchoring equipment shall be attached to the existing structure and pier fenders except with prior written approval the Engineer of the proposed methods of securing barges and other equipment. The Contractor shall submit working drawings for proposed method of securing barges and other equipment to the Engineer for his review and approval. Working drawings shall be approved by the Engineer before any work involving such drawings is performed. Such approval, if granted, shall in no way relieve the Contractor of his responsibility for preservation of property under Section 7-1.11, "Preservation of Property," of the Standard Specifications.

5-1.34 AERIALLY DEPOSITED LEAD

The material in the unpaved areas in the Contractor's work zone contains lead. This material shall be kept within the highway Right-of-Way. Information on the known quantities of lead, and technical information is included in "Materials Information" available to bidders.

Attention is directed to "Earthwork" and "Clearing and Grubbing" elsewhere in these special provisions regarding the handling of materials with lead.

Excavation, reuse, and disposal of material with lead shall be in accordance with all rules and regulations of agencies including, but not limited to, the following:

United States Department of Transportation (USDOT)
United States Environmental Protection Agency (USEPA)
California Environmental Protection Agency (Cal-EPA)
Department of Toxic Substances Control (DTSC), Region 2
Integrated Waste Management Board
Regional Water Quality Control Board (RWQCB), Region 2
State Air Resources Control Board
Bay Area Air Quality Management District (BAAQMD)
California Division of Occupational Safety and Health Administration (CAL-OSHA)

REVISED PER ADDENDUM NO. 1 DATED NOVEMBER 7, 1997

The Contractor shall prepare a Health and Safety Compliance Plan for all site personnel in accordance with CAL-OSHA regulations. The Contractor's attention is directed to Title 8, California Code of Regulations Section 1532.1 (8 CCR 1532.1) in the Construction Safety Orders. The compliance plan required shall be approved by a Certified Industrial Hygienist. The plan shall be submitted at least 5 days prior to beginning excavation work.

Prior to performing excavation work, personnel who will be working in the areas containing lead, including State personnel, shall complete a safety training program which meets the requirements of 8 CCR 1532.1. Any personal protective equipment required by the Contractor's Health and Safety Compliance Plan, for personnel working within areas with lead, shall be supplied to State personnel by the Contractor. The number of State personnel requiring the safety training and any protective equipment will be 5.

Full compensation for conforming to the requirements of this section shall be considered as included in the contract prices paid per cubic yard for the various items of work involved and no additional compensation will be allowed therefor.

5-1.35 COST REDUCTION INCENTIVE

Attention is directed to Section 5-1.14, "Cost Reduction Incentive," of the Standard Specifications and these special provisions.

Cost reduction proposals which require re-design or analysis by the Engineer, regarding structural design details specific to the bridge retrofit work, will not be considered.

Cost reduction proposals involving modifications to other work, or to any construction sequence shown on the plans or specified in the special provisions, which do not jeopardize the structural integrity of the bridge at any time or do not affect the retrofit design of the bridge, as determined by the Engineer, may be considered.

Prior to preparing a cost reduction proposal for other work or construction sequence, the Contractor shall request a meeting with the Engineer to discuss the proposal in concept and determine whether the cost reduction proposal will be considered. Items of discussion will also include permit issues, impact on other projects, impact on the project schedule, and review times required by the Department and other agencies.

5-1.36 ESCROW OF BID DOCUMENTATION

Bid documentation shall consist of all documentary and calculated information generated by the Contractor in preparation of the bid. The bid documentation shall conform to the requirements in these special provisions, and shall be submitted to the Department and held in escrow for the duration of the contract.

In the resolution of disputes involving the project, the escrowed bid documents will be the only documents accepted from the Contractor regarding preparation of the bid.

In signing the proposal, the bidder certifies that the material submitted for escrow constitutes all the documentary information used in preparation of the bid and that he has personally examined the contents of the container and that they are complete.

The bidder shall include with the proposal, the identification of the bidder's representative authorized to present the bid documentation and the persons responsible for preparing the bidder's estimate.

Nothing in the bid documentation shall be construed to change or modify the terms or conditions of the contract.

Escrowed bid documentation will not be used for pre-award evaluation of the Contractor's anticipated methods of construction, nor to assess the Contractor's qualifications for performing the work.

Bid documentation shall clearly itemize the Contractor's estimated costs of performing the work. The documentation submitted shall be complete and so detailed as to allow for an in-depth analysis of the Contractor's estimate.

The bid documentation shall include, but not be limited to: quantity takeoffs; rate schedules for the direct costs and the time- and nontime-related indirect costs for labor (by craft), plant and equipment ownership and operation, permanent and expendable materials, insurance and subcontracted work; estimated construction schedules, including sequence and duration and development of production rates; quotations from subcontractors and suppliers; estimates of field and home office overhead; contingency and margin for each contract item of work; and other reports, calculations and information used by the bidder to arrive at the estimate submitted with the proposal.

The Contractor shall also submit bid documentation for each subcontractor whose total subcontract exceeds $250,000. Subcontractor bid documentation shall be enclosed with the Contractor's submittal. The examination of subcontractors' bid documentation will be accomplished in the same manner as for the Contractor's bid documentation. If a subcontractor is replaced, bid documentation for the new subcontractor shall be submitted for review and escrow before authorization for the substitution will be granted. Upon request of a subcontractor, the bid documentation from that subcontractor shall be reviewed only by the subcontractor and the Department.

If the bidder is a joint venture, the bid documentation shall include the joint venture agreement, the joint venture estimate comparison and final reconciliation of the joint venture estimate.

The first, second, and third apparent low bidders shall present the bid documentation for escrow at the District 04 Office, 111 Grand Avenue, Room 12-816, Oakland, California, on the first Monday at 10:00 a.m. following the time indicated in the "Notice to Contractors" for the opening of bids. Copies of the proposals submitted by the first, second and third apparent low bidders will be provided to the respective bidders for inclusion in the bid documentation to be escrowed.

Bid documentation shall be submitted in a sealed container, clearly marked with the bidder's name, date of submittal, project contract number and the words, "Bid Documentation for Escrow."

Failure to submit the actual and complete bid documentation as specified herein within the time specified shall be cause for rejection of the proposal.

Upon submittal, the bid documentation of the apparent low bidder will be examined and inventoried by the duly designated representatives of the Contractor and the Department to ensure that the bid documentation is authentic, legible,
and in accordance with the terms of this section "Escrow of Bid Documentation." The examination will not include review of, nor will it constitute approval of, proposed construction methods, estimating assumptions or interpretation of the contract. The examination will not alter any conditions or terms of the contract. The acceptance or rejection by the Department that the submitted bid documents are in compliance with this section "Escrow of Bid Documentation" will be completed within 48 hours of the time the bid documentation is submitted by the Contractor.

At the completion of the examination, the bid documents will be sealed and jointly deposited at an agreed commercial bank.

Bid documentation submitted by the second and third apparent low bidders will be jointly deposited at agreed commercial banks. If the apparent low bid is withdrawn or rejected, the bid dsocumentation of the second low bidder will be examined and inventoried in the manner specified above, then sealed and deposited again in escrow. If the second low bid is withdrawn or rejected, the bid dsocumentation of the third low bidder will be examined and inventoried in the manner specified above, then sealed and deposited again in escrow. Upon execution and final approval of the contract or rejection of all bids, the bid documentation will be returned to any remaining unsuccessful bidders.

The escrowed bid documentation may be examined by the designated representatives of both the Department and the Contractor, at any time deemed necessary by either the Department or the Contractor to assist in the negotiation of price adjustments and change orders, or in the settlement of claims or disputes.

If requested by a Disputes Review Board, the escrowed bid documentation may be utilized to assist the Board in its recommendations.

The bid documentation submitted by the Contractor will be held in escrow until the contract has been completed, the ultimate resolution of all disputes and claims has been achieved and receipt of final payment has been accepted by the Contractor. The escrowed bid documentation will then be released from escrow to the Contractor.

The bid documentation submitted by the bidder is, and shall remain, the property of the bidder, and is subject to only joint review by the Department and the bidder. The Department stipulates and expressly acknowledges that the submitted bid documentation constitutes trade secrets and will not be deemed public records. This acknowledgment is based on the Department's express understanding that the information contained in the bid documentation is not known outside the bidder's business, is known only to a limited extent and only by a limited number of employees of the bidder, is safeguarded while in the bidder's possession, is extremely valuable to the bidder and could be extremely valuable to the bidder's competitors by virtue of it reflecting the bidder's contemplated techniques of construction. The Department acknowledges that the bid documentation includes a compilation of information used in the bidder's business, intended to give the bidder an opportunity to obtain an advantage over competitors who do not know of or use the contents of the documentation. The Department agrees to safeguard the bid documentation, and all information contained therein, against disclosure, including disclosure of subcontractor bid documentation to the Contractor and other subcontractors to the fullest extent permitted by law. However, in the event of arbitration or litigation, the bid documentation shall be subject to discovery, and the Department assumes no responsibility for safeguarding the bid documentation unless the Contractor has obtained an appropriate protective order issued by the arbitrator or the court.

Full compensation for preparing the bid documentation, presenting it for escrow and reviewing it for escrow and upon request of the Engineer shall be considered as included in the contract prices paid for the various items of work, and no additional compensation will be allowed therefor.

The direct cost of depositing the bid documentation in escrow at the agreed commercial bank will be paid in accordance with Section 9-1.03, "Force Account Payment," of the Standard Specifications. No markups will be added to this direct cost.

5-1.37 FORCE ACCOUNT PAYMENT

The second, third and fourth paragraphs of Section 9-1.03A, "Work Performed by Contractor," of the Standard Specifications, shall not apply.

To the total of the direct costs computed as provided in Sections 9-1.03A(1), "Labor," 9-1.03A(2), "Materials," and 9-1.03A(3), "Equipment Rental," of the Standard Specifications, there will be added a markup of 25 percent to the cost of labor, 10 percent to the cost of materials, and 10 percent to the equipment rental.

The above markups, together with payments made for time related overhead pursuant to "Overhead" of these special provisions, shall constitute full compensation for all overhead costs for work performed on a force account basis. These overhead costs shall be deemed to include all items of expense not specifically designated as cost or equipment rental in Sections 9-1.03A(1), "Labor," 9-1.03A(2), "Materials," and 9-1.03A(3), "Equipment Rental," of the Standard Specifications. The total payment made as provided above and in the first paragraph of Section 9-1.03A, "Work Performed by Contractor," shall be deemed to be the actual cost of the work performed on a force account basis, and shall constitute full compensation therefor.

When extra work to be paid for on a force account basis is performed by a subcontractor, approved in accordance with the provisions in Section 8-1.01, "Subcontracting," of the Standard Specifications, an additional markup of 5 percent will be added to the total cost of said extra work including all markups specified in this section "Force Account Payment". Said additional 5 percent markup shall reimburse the Contractor for additional administrative costs, and no other additional payment will be made by reason of performance of the extra work by a subcontractor.

5-1.38 OVERHEAD

The Contractor will be compensated for overhead in accordance with these special provisions.

Attention is directed to "Force Account Payment" and "Progress Schedule (Critical Path)" of these special provisions.

Section 9-1.08, "Adjustment of Overhead Costs," of the Standard Specifications shall not apply.

Time related overhead shall consist of those overhead costs, including field and home office overhead, that are in proportion to the time required to complete the work.

The quantity of time related overhead to be measured for payment will be the number of working days specified in "Beginning of Work, Time of Completion and Liquidated Damages" of these special provisions, adjusted only as a result of suspensions and adjustments of time which revise the current contract completion date and which are also any of the following:

1) suspensions of work ordered in accordance with Section 8-1.05, "Temporary Suspension of Work," of the Standard Specifications, except:

    a) suspensions ordered due to the failure on the part of the Contractor to carry out orders given, or to perform any provision of the contract; and
    b) suspensions ordered due to unsuitable weather conditions;

2) extensions of time granted by the State in accordance with the provisions of the fifth paragraph of Section 8-1.07, "Liquidated Damages," of the Standard Specifications; or
3) reductions in contract time set forth in approved contract change orders, in accordance with Section 4-1.03, "Changes," of the Standard Specifications.

The contract price paid for time related overhead shall include full compensation for time related overhead measured for payment as specified above, incurred by the Contractor and by any joint venture partner, subcontractor, supplier or other party associated with the Contractor.

No adjustment in compensation will be made for any increase or decrease in the quantities of time related overhead required, regardless of the reason for the increase or decrease. The provisions in Sections 4-1.03B, "Increased or Decreased Quantities" and 4-1.03C, "Changes in Character of the Work," of the Standard Specifications, shall not apply to time related overhead.

For progress payment purposes, the number of working days to be paid for time related overhead in each monthly estimate will be the number of working days specified above to be measured for payment that the Contractor performed work on the current controlling operation or operations as specified in Section 8-1.06, "Time of Completion," of the Standard Specifications. Working days specified above to be measured for payment, on which the Contractor did not perform work on the controlling operation or operations will be measured and included for payment in the first estimate made in accordance with Section 9-1.07, "Payment After Acceptance," of the Standard Specifications.

Full compensation for overhead other than time related overhead measured and paid for as specified above, and other than overhead costs for extra work performed pursuant to Section 4-1.03D of the Standard Specifications, shall be considered as included in the various items of work and no additional compensation will be allowed therefor.

REVISED PER ADDENDUM NO.1 DATED NOVEMER 7, 1997

SECTION 8-3. WELDING

8-3.01 WELDING QUALITY CONTROL

Welding quality control shall apply to the items of work described herein and shall conform to the requirements in the AWS welding codes, the Standard Specifications and these special provisions.

Wherever reference is made to the following AWS welding codes in the Standard Specifications, on the plans or in these special provisions, the year of adoption for these codes shall be as listed:

AWS Code	Year of Adoption
D1.1	1996
D1.4	1992
D1.5	1995
D1.5 (metric only)	1996

All requirements of the AWS welding codes shall apply unless specified otherwise in the Standard Specifications, on the plans or in these special provisions. Wherever the abbreviation AWS is used, it shall be equivalent to the abbreviations ANSI/AWS or ANSI/AASHTO/AWS.

Except for steel piling, welding performed anywhere other than at a permanent fabrication facility that is certified under the AISC Quality Certification Program, Category III, Major Steel Bridges, shall conform to the provisions for welding quality control as specified herein. Welding of steel piling shall conform to the provisions in "Piling" elsewhere in these special provisions and to the provisions for welding quality control specified herein.

The welding of all fracture critical members (FCMs) shall conform to the provisions specified in the Fracture Control Plan (FCP) and herein.

Unless otherwise specified, when any type of welding is performed on items of work including 1) steel piles, 2) bar reinforcement, 3) steel structures, 4) column casings and 5) miscellaneous metal, the Contractor shall designate in writing, a welding Quality Control Manager (QCM). The QCM shall be responsible directly to the Contractor for the quality of all welding, including materials and workmanship, performed by the Contractor and all subcontractors.

The QCM shall not be employed or compensated by any subcontractor, or by other persons or entities hired by subcontractors, who will provide other services or materials for the project. The QCM may be an employee of the Contractor.

No welding inspection personnel or nondestructive testing (NDT) firms to be used in the work shall be employed or compensated by any subcontractor, or by other persons or entities hired by subcontractors, who will provide other services or materials for the project.

The QCM shall be the sole individual responsible to the Contractor for submitting and receiving all correspondence and required submittals and reports regarding welding to and from the Engineer.

Prior to submitting the Quality Control Plan (QCP) required herein, a pre-welding meeting shall be held between the Engineer, Contractor and any welding subcontractors to be used in the work to discuss the requirements for the QCP.

Prior to performing any welding, the Contractor shall submit to the Engineer, in accordance with the provisions of Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications, 3 copies of a separate QCP for each item of work for which welding is to be performed. As a minimum, each QCP shall include the following:

1. The name of the welding firm and the NDT firm to be used;
2. A manual prepared by the NDT firm that shall include equipment, testing procedures, code of safe practices, the Written Practice of the NDT firm, and the names, qualifications and documentation of certifications for all personnel to be used;
3. The name of the QCM and the names, qualifications and documentation of certifications for all Quality Control (QC) Inspectors and Assistant Quality Control Inspectors to be used;
4. An organizational chart showing all QC personnel and their assigned QC responsibilities;
5. The methods and frequencies for performing all required quality control procedures, including QC inspection forms to be used, as required by the specifications including:

    (a) all visual inspections;
    (b) all NDT including radiographic geometry, penetrameter and shim selection, film quality, film processing, radiograph identification and marking system, and film interpretation and reports; and
    (c) calibration procedures and calibration frequency for all NDT equipment;

REVISED PER ADDENDUM NO. 1 DATED NOVEMBER 7, 1997

6. A system for the identification and tracking of all welds, NDT and any required repairs, and a procedure for the reinspection of any repaired welds. The system shall have provisions for 1) permanently identifying each weld and the person who performed the weld and 2) placing all identification and tracking information on each radiograph;
7. Standard procedures for performing noncritical repair welds. Noncritical repair welds aredefined as welds to deposit additional weld beads or layers to compensate for insufficient weld size and to fill limited excavations that were performed to remove unacceptable edge or surface discontinuities, rollover or undercut. The depth of these excavations shall not exceed 65 percent of the specified weld size;
8. The welding procedure specification (WPS), including documentation of all supporting Procedure Qualification Record (PQR) tests performed, and the name of the testing laboratory who performed the tests, to verify the acceptability of the WPS. The submitted WPS shall be within the allowable period of effectiveness;
9. Documentation of all certifications for welders for each weld process and position that will be used. Certifications shall list the electrodes used, test position, base metal and thickness, tests performed, and the witnessing authority. All certifications shall be within the allowable period of effectiveness; and
10. One copy each of all AWS welding codes and the FCP which are applicable to the welding to be performed. These codes and the FCP shall become the permanent property of the Department.

The Engineer shall have 10 working days to review the QCP submittal after a complete plan has been received. No welding shall be performed until the QCP is approved in writing by the Engineer. Should the Engineer fail to complete the review within this time allowance and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of the delay in reviewing the QCP, the delay will be considered a right of way delay as specified in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

An amended QCP or addendum shall be submitted to, and approved in writing by the Engineer, for any proposed revisions to the approved QCP. An amended QCP or addendum will be required for any revisions to the QCP, including but not limited to a revised WPS, additional welders, changes in NDT firms or procedures, QC or NDT personnel, or updated systems for tracking and identifying welds. The Engineer shall have 3 working days to complete the review of the amended QCP or addendum. Work that is affected by any of the proposed revisions shall not be performed until the amended QCP or addendum has been approved. Should the Engineer fail to complete the review within this time allowance and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of the delay in reviewing the amended QCP or addendum, the delay will be considered a right of way delay as specified in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

After final approval of the QCP, amended QCP or addendum, the Contractor shall submit to the Engineer 7 copies each of these approved documents.

A daily production log for welding shall be kept by the QCM for each day that welding is performed. The log shall clearly indicate the locations of all welding, and shall include the welders' names, amount of welding performed, any problems or deficiencies discovered, and any testing or repair work performed, at each location. The daily report from each Quality Control Inspector shall also be included in the log.

It is expressly understood that the Engineer's approval of the Contractor's QCP shall not relieve the Contractor of any responsibility under the contract for the successful completion of the work in conformity with the requirements of the plans and specifications. The Engineer's approval shall not constitute a waiver of any of the requirements of the plans and specifications nor relieve the Contractor of any obligation thereunder, and defective work, materials and equipment may be rejected notwithstanding approval of the QCP.

The following items shall be included in a Welding Report that is to be submitted to the Engineer within 7 days following the performance of any welding:

1. Reports of all visual weld inspections and NDT;
2. Radiographs and radiographic reports, and other required NDT reports;
3. Documentation that the Contractor has evaluated all radiographs and other nondestructive tests, corrected all rejectable deficiencies, and all repaired welds have been reexamined by the required NDT and found acceptable; and
4. Daily production log.

All reports regarding NDT, including radiographs, shall be signed by both NDT technician and the person that performed the review, and then submitted directly to the QCM for review and signature prior to submittal to the Engineer. Corresponding names shall be clearly printed or typewritten next to all signatures.

The Engineer shall review the Welding Report to determine if the Contractor is in conformance with the QCP. Except for steel piling, the Engineer shall be allowed 7 days to review the report and respond in writing after a complete Welding Report has been received. The review time for steel piling shall be as specified in "Piling" elsewhere in these special provisions. Prior to receiving notification from the Engineer of the Contractor's conformance with the QCP, the Contractor may encase in concrete or cover any welds for which a Welding Report has been submitted. However, should the Contractor elect to encase or cover those welds prior to receiving notification from the Engineer, it is expressly understood that the Contractor shall not be relieved of the responsibility for incorporating material in the work that conforms to the requirements of the plans and specifications. Any material not conforming to these requirements will be subject to rejection. Should the Contractor elect to wait to encase or cover any welds pending notification by the Engineer, and should the Engineer fail to complete the review and provide notification within this time allowance, and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of the delay in notification, the delay will be considered a right of way delay as specified in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

Sections 6.1.1 through 6.1.3.3 of AWS D 1.1, Sections 7.1.1 and 7.1.2 of AWS D 1.4, and Sections 6.1.1.1 through 6.1.3.3 of AWS D 1.5 are replaced with the following:

Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing prior to welding, during welding and after welding as specified in this section and additionally as necessary to ensure that materials and workmanship conform to the requirements of the contract documents.

The Quality Control (QC) Inspector shall be the duly designated person who performs inspection, testing, and quality matters for all welding.

Quality Assurance (QA) is the prerogative of the Engineer. The QA Inspector is the duly designated person who acts for and on behalf of the Engineer.

All QC Inspectors shall be responsible for quality control acceptance or rejection of materials and workmanship, and shall be currently certified as AWS Certified Welding Inspectors (CWI) in accordance with the provisions of AWS QC1, "Standard and Guide for Qualification of Welding Inspectors."

The QC Inspector may be assisted by an Assistant QC Inspector provided that this individual is currently certified as an AWS Certified Associate Welding Inspector (CAWI) in accordance with the provisions of AWS QC1, "Standard and Guide for Qualification of Welding Inspectors," or has equivalent qualifications. The QC Inspector shall monitor the Assistant QC Inspector’s work, and shall be responsible for signing all reports.

When the term "Inspector" is used without further qualification, it shall refer to the QC Inspector.

Section 6.14.7, "Personnel Qualification," of AWS D 1.1, Section 7.7.6, "Personnel Qualification," of AWS D 1.4 and Section 6.1.3.4, "Personnel Qualification," of AWS D 1.5 are amended to read:

Personnel performing NDT shall be qualified in accordance with the current edition of the American Society for Nondestructive Testing (ASNT) Recommended Practice No. SNT-TC-1A and the Written Practice of the NDT firm. Only individuals who are 1) qualified for NDT Level II, or 2) Level III technicians who have been directly certified by the ASNT and are authorized to perform the work of Level II technicians, shall perform NDT, review the results, and prepare the written reports.

Section 6.5.4, "Scope of Examination," of AWS D 1.1 and Section 7.5.4 of AWS D 1.4 are amended to read:

The QC Inspector shall inspect and approve the joint preparation, assembly practice, welding techniques, and performance of each welder, welding operator, and tack welder to make certain that the applicable requirements of this code and the approved WPS are met.

Section 6.5.4 of AWS D 1.5 is amended to read:

The QC Inspector shall inspect and approve the joint preparation, assembly practice, welding techniques, and performance of each welder, welding operator, and tack welder to make certain that the applicable requirements of this code and the approved WPS are met. The QC Inspector shall examine the work to make certain that it meets the requirements of section 3 and 9.21. The size and contour of welds shall be measured using suitable gages. Visual inspection for cracks in welds and base metal, and for other discontinuities should be aided by strong light magnifiers, or such other devices as may be helpful. Acceptance criteria different from those specified in this code may be used when approved by the Engineer.

REVISED PER ADDENDUM NO. 1 DATED NOVEMBER 7, 1997

The Engineer shall have the authority to verify the qualifications or certifications of any welder, Quality Control Inspector, or NDT personnel to specified levels by retests or other means.

A sufficient number of QC Inspectors shall be provided to ensure continuous inspection when any welding is being performed. Continuous inspection, as a minimum, shall include (1) having QC Inspectors continually present on all shifts when any welding is being performed, or (2) having a QC Inspector within such close proximity of all welding operations that inspections by the QC Inspector of each operation, at each welding location, shall not lapse for a period exceeding 30 minutes.

Inspection and approval of the joint preparation, assembly practice, welding techniques, and performance of each welder, welding operator, and tack welder shall be documented by the QC Inspector on a daily basis for each day that welding is performed.

The QC Inspector shall provide reports to the QCM on a daily basis for each day that welding is performed.

Except for noncritical weld repairs, base metal repairs, or any other type of repairs not submitted in the QCP, the Engineer shall be notified immediately in writing when any welding problems or deficiencies are discovered and also of the proposed repair procedures to correct them. The Engineer shall have 5 working days to review these procedures. No remedial work shall begin until the repair procedures are approved in writing by the Engineer. Should the Engineer fail to complete the review within this time allowance and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of the delay in reviewing the proposed repair procedures, the delay will be considered a right of way delay as specified in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

When joint details that are not prequalified by the applicable AWS codes are proposed for use in the work, all welders using these details shall perform a qualification test plate using the approved WPS variables and the joint detail to be used in production. The test plate shall be the maximum thickness to be used in production. The test plate shall be mechanically or radiographically tested as directed by the Engineer. Mechanical and radiographic testing and acceptance criteria shall be as specified in the applicable AWS codes.

The period of effectiveness for a welder’s or welding operator’s qualification shall be a maximum of 3 years for the same weld process, welding position, and weld type. A valid qualification at the beginning of work on a contract will be acceptable for the entire period of the contract, as long as the welder’s work remains satisfactory.

All qualification tests for welders, welding operators, and WPSs used in welding operations will be witnessed by the Engineer or an independent third party acceptable to the Engineer.

Section 6.6.5, "Nonspecified Nondestructive Testing Other Than Visual," of AWS D 1.1, Section 6.6.5 of AWS D 1.4 and Section 6.6.5 of AWS D 1.5 shall not apply.

For any welding, the Engineer may direct the Contractor to perform NDT that is in addition to the visual inspection or NDT specified in the AWS welding codes, in the Standard Specifications or in these special provisions. Additional NDT required by the Engineer, will be paid for as extra work in accordance with Section 4-1.03D, "Extra Work," of the Standard Specifications. Should any welding deficiencies be discovered by this additional NDT, the cost of the testing will not be paid for as extra work, and shall be at the Contractor’s expense.

All required repair work to correct welding deficiencies, whether discovered by the required visual inspection or NDT, or by additional NDT directed by the Engineer, and any associated delays or expenses caused to the Contractor by performing these repairs, shall be at the Contractor’s expense.

At the completion of all welding, the QCM shall sign and furnish to the Engineer, a certificate of compliance in accordance with Section 6-1.07, "Certificates of Compliance," of the Standard Specifications for each item of work for which welding was performed. The certificate shall state that all of the materials and workmanship incorporated in the work, and all required tests and inspections of this work, have been performed in accordance with the details shown on the plans and the provisions of the Standard Specifications and these special provisions.

Full compensation for conforming to all of the requirements of this section, Welding Quality Control, shall be considered as included in the contract prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

SECTION 9. DESCRIPTION OF BRIDGE WORK

The bridge work to be done consists, in general, of earthquake retrofitting portions of the following structure in accordance with the details shown on the plans and briefly described as:

REVISED PER ADDENDUM NO. 1 DATED NOVEMBER 7, 1997

shall be performed immediately prior to new construction with which they conflict.

Existing restrainers shall be removed immediately prior to new construction with which they conflict. Removal of restrainers shall be as approved by the Engineer.

10-1.02 WATER POLLUTION CONTROL

Water pollution control work shall conform to the requirements in Section 7-1.01G, "Water Pollution," of the Standard Specifications and these special provisions.

This project shall conform to the requirements of Permit No.CAS029998 issued by the San Francisco Bay Regional (Region 2) Water Quality Control Board. This permit and amendments thereof, hereafter referred to as the "Permit," regulates storm water discharges associated with construction activities.

Water pollution control work shall conform to the requirements in the Construction Contractor's Guide and Specifications of the Caltrans Storm Water Quality Handbooks, dated April 1997, and addenda thereto issued up to and including the date of advertisement of the project, hereafter referred to as the "Handbook". Copies of the Handbook may be obtained from the Department of Transportation, Material Operations Branch, Publication Distribution Unit, 1900 Royal Oaks Drive, Sacramento, California 95815, Telephone: (916) 445-3520. In addition, a Conceptual Storm Water Pollution Prevention Plan, hereafter referred to as the "CSWPPP," has been prepared for this project by the Department. The CSWPPP shall be used as a reference for determining and preparing the minimum work required under the Permit and this Special Provision.

Copies of the Handbook, CSWPPP, and Permit are available for review at 111 Grand Avenue, Oakland, California 94601. Please call the Toll Bridge Seismic Program Duty Senior, telephone number (510) 286-5549, to reserve a copy of the documents at least 24 hours in advance.

The Contractor shall become fully informed of and comply with the applicable provisions of the Handbook, Permit and Federal, State and local regulations that govern the Contractor's operations and storm water discharges from both the project site and areas of disturbance outside the project limits during construction. The Contractor shall maintain a copy of the Permit at the project site and shall make the Permit available during construction activities.

Unless arrangements for disturbance of areas outside the project limits are made by the Department and made part of the contract, it is expressly agreed that the Department assumes no responsibility to the Contractor or property owner whatsoever with respect to any arrangements made between the Contractor and property owner to allow disturbance of areas outside the project limits.

The Contractor shall be responsible for the costs and for any liability imposed by law as a result of the Contractor's failure to comply with the requirements set forth in this section "Water Pollution Control", including but not limited to, compliance with the applicable provisions of the Handbook, Permit and Federal, State and local regulations. For the purposes of this paragraph, costs and liabilities include, but are not limited to, fines, penalties and damages whether assessed against the State or the Contractor, including those levied under the Federal Clean Water Act and the State Porter Cologne Water Quality Act.

In addition to any remedy authorized by law, so much of the money due the Contractor under the contract that shall be considered necessary by the Department may be retained by the State of California until disposition has been made of the costs and liabilities.

The retention of money due the Contractor shall be subject to the following:

1. The Department will give the Contractor 30 days notice of its intention to retain funds from any partial payment which may become due to the Contractor prior to acceptance of the contract. Retention of funds from any payment made after acceptance of the contract may be made without prior notice to the Contractor.
2. No retention of additional amounts out of partial payments will be made if the amount to be retained does not exceed the amount being withheld from partial payments pursuant to Section 9-1.06, "Partial Payments," of the Standard Specifications.
3. If the Department has retained funds and it is subsequently determined that the State is not subject to the costs and liabilities in connection with the matter for which the retention was made, the Department shall be liable for interest on the amount retained at the legal rate of interest for the period of the retention.

Conformance with the requirements of this section "Water Pollution Control" shall not relieve the Contractor from the Contractor's responsibilities, as provided in Section 7-1.11, "Preservation of Property," and Section 7-1.12, "Responsibility for Damage," of the Standard Specifications.

The Contractor shall, at reasonable times, allow authorized agents of the California Regional Water Quality Control Board, State Water Resources Control Board, U. S. Environmental Protection Agency and local storm water management agency, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the construction site and the Contractor's facilities pertinent to the work;
2. Have access to and copy any records that must be kept as specified in the Permit;
3. Inspect the construction site and related soil stabilization practices and sediment control measures; and
4. Sample or monitor for the purpose of ensuring compliance with the Permit.

The Contractor shall notify the Engineer immediately upon request from regulatory agencies to enter, inspect, sample, monitor or otherwise access the project site or the Contractor's records.

STORM WATER POLLUTION PREVENTION PLAN PREPARATION, APPROVAL AND UPDATES.—As part of the water pollution control work, a Storm Water Pollution Prevention Plan, hereafter referred to as the "SWPPP," is required for this contract. The SWPPP shall conform to the requirements in Section 7-1.01G, "Water Pollution," of the Standard Specifications, the requirements in the Handbook, the requirements of the Permit and these special provisions. Upon the Engineer's approval of the SWPPP, the SWPPP shall be deemed to fulfill the requirements of Section 7-1.01G, "Water Pollution," of the Standard Specifications for development and submittal of a Water Pollution Control Program.

No work having potential to cause water pollution, as determined by the Engineer, shall be performed until the SWPPP has been approved by the Engineer.

Within 20 days after the approval of the contract, the Contractor shall submit 3 copies of the SWPPP to the Engineer. The Contractor shall allow 15 days for the Engineer to review the SWPPP. If revisions are required, as determined by the Engineer, the Contractor shall revise and resubmit the SWPPP within 10 days of receipt of the Engineer's comments and shall allow 10 days for the Engineer to review the revisions. Upon the Engineer's approval of the SWPPP, 3 additional copies of the SWPPP, incorporating the required changes, shall be submitted to the Engineer. In order to allow construction activities to proceed, the Engineer may conditionally approve the SWPPP while minor revisions are being completed.

The objectives of the SWPPP shall be to identify pollution sources that may adversely affect the quality of storm water discharges associated with the project and to identify, construct, implement and maintain water pollution control measures, hereafter referred to as control measures, to reduce to the extent feasible pollutants in storm water discharges from the construction site both during and after construction is completed under this contract.

The SWPPP shall incorporate control measures in the following categories:

1. Soil stabilization practices;
2. Sediment control practices;
3. Sediment tracking control practices;
4. Wind erosion control practices; and
5. Non-storm water management and waste management and disposal control practices.

Specific objectives and minimum requirements for each category of control measures are contained in the Handbook.

The Contractor shall consider the objectives and minimum requirements presented in the Handbook for each of the above categories. The special minimum requirements listed below supersede the minimum requirements listed in the Handbook for the same category. When minimum requirements are listed for any category, the Contractor shall incorporate into the SWPPP, and implement on the project, one or more of the listed minimum controls required in order to meet the pollution control objectives for the category. In addition, the Contractor shall consider other control measures presented in the Handbook and shall incorporate into the SWPPP and implement on the project the control measures necessary to meet the objectives of the SWPPP. The Contractor shall document the selection process in accordance with the procedure specified in the Handbook. The following special minimum requirements are established:

Category:	Minimum Requirements:
Non-Storm Water and Waste Management Controls	CD10(2) Material Delivery and Storage, CD11(2) Material Use, CD12(2) Spill Prevention and Control, CD13(2) Solid Waste Management, CD18(2) Vehicle and Equipment Cleaning, CD19(2) Vehicle and Equipment Fueling, CD20(2) Vehicle and Equipment Maintenance, CD22(2) Scheduling CD44(2) Illicit Discharge/Illegal Dumping Reporting
Erosion & Sediment Source Controls	CD25(25(2) Mulching CD26B(2) Geotextiles, Mats/Plastic Covers & Erosion Control Blankets
Wind Erosion Controls	CD26B(2) Geotextiles, Mats/Plastic Covers & Erosion Control Blankets
Sediment Treatment Controls	CD40(2) Storm Drain Inlet Protection CD43(2) Fiber Rolls

The SWPPP shall include, but not be limited to, the following items as described in the Handbook and Permit:

1. Source Identification;
2. Erosion and Sediment Controls;
3. Non-Storm Water Management;
4. Waste Management and Disposal;
5. Maintenance, Inspection and Repair;
6. Training;
7. List of Contractors and Subcontractors;
8. Post-Construction Storm Water Management;
9. Preparer;
10. Copy of the local permit;
11. BMP Consideration Checklist;
12. SWPPP Checklist;
13. Schedule of Values; and
14. Water Pollution Control Drawings.

The Contractor shall amend the SWPPP, graphically and in narrative form, whenever there is a change in construction activities or operations which may affect the discharge of significant quantities of pollutants to surface waters, ground waters, municipal storm drain systems, or when deemed necessary by the Engineer. The SWPPP shall also be amended if it is in violation of any condition of the Permit, or has not effectively achieved the objective of reducing pollutants in storm water discharges. Amendments shall show additional control measures or revised operations, including those in areas not shown in the initially approved SWPPP, which are required on the project to control water pollution effectively. Amendments to the SWPPP shall be submitted for review and approval by the Engineer in the same manner specified for the initially approved SWPPP. Approved amendments shall be dated and logged in the SWPPP. Upon approval of the amendment, the Contractor shall implement the additional control measures or revised operations.

The Contractor shall keep a copy of the SWPPP and approved amendments at the project site. The SWPPP shall be made available upon request of a representative of the Regional Water Quality Control Board, State Water Resources Control Board, U.S. Environmental Protection Agency or local storm water management agency. Requests by the public shall be directed to the Engineer.

By June 15 of each year, the Contractor shall submit an annual certification to the Engineer stating compliance with the requirements governing the Permit. If the project is in non-compliance at any time, the Contractor shall make a written report to the Engineer within 48 hours of identification of non-compliance.

REVISED PER ADDENDUM NO. 1 DATED NOVEMBER 7, 1997

SCHEDULE OF VALUES.—The Contractor shall submit with the SWPPP, for approval by the Engineer, a schedule of values detailing the cost breakdown of the contract lump sum item for water pollution control. The schedule of values shall reflect the items of work, quantities and costs for control measures shown in the SWPPP, except for critical temporary controls and permanent control measures which are shown on the project plans and for which there is a contract item of work. Adjustments in the items of work and quantities listed in the schedule of values shall be made when required to address approved amendments to the SWPPP.

The sum of the amounts for the units of work listed in the schedule of values shall be equal to the contract lump sum price for water pollution control.

If approved in writing by the Engineer, the schedule of values will be used to determine progress payments for water pollution control during the progress of the work, and as the basis for calculating any adjustment in compensation for the contract item for water pollution control due to changes in the work ordered by the Engineer.

SWPPP IMPLEMENTATION.—Upon approval of the SWPPP, the Contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting and maintaining the control measures included in the SWPPP and any amendments thereto and for removing and disposing of temporary control measures. Unless otherwise directed by the Engineer or specified in these special provisions, the Contractor's responsibility for SWPPP implementation shall continue throughout any temporary suspension of work ordered in accordance with Section 8-1.05, "Temporary Suspension of Work," of the Standard Specifications. Requirements for installation, construction, inspection, maintenance, removal and disposal of control measures are specified in the Handbook and these special provisions.

Soil stabilization practices and sediment control measures, including minimum requirements, shall be provided throughout the winter season, defined as between September 15 and May 1.

Implementation of soil stabilization practices and sediment control measures for soil-disturbed areas of the project site shall be completed, except as provided for below, no later than 20 days prior to the beginning of the winter season or upon start of applicable construction activities for projects which begin either during or within 20 days of the winter season.

Throughout the winter season, the active, soil-disturbed area of the project site shall be no more than 2.5 acres. The Engineer may approve, on a case-by-case basis, expansions of the active, soil-disturbed area limit. The Contractor shall demonstrate the ability and preparedness to fully deploy soil stabilization practices and sediment control measures to protect soil-disturbed areas of the project site before the onset of precipitation. The Contractor shall maintain a quantity of soil stabilization and sediment control materials on site equal to 125 percent of that sufficient to protect unprotected, soil-disturbed areas on the project site and shall maintain a detailed plan for the mobilization of sufficient labor and equipment to fully deploy control measures required to protect unprotected, soil-disturbed areas on the project site prior to the onset of precipitation. The Contractor shall include a current inventory of control measure materials and the detailed mobilization plan as part of the SWPPP.

Throughout the winter season, soil-disturbed areas of the project site shall be considered to be nonactive whenever soil disturbing activities are expected to be discontinued for a period of 20 or more days and the areas are fully protected. Areas that will become nonactive either during the winter season or within 20 days thereof shall be fully protected with soil stabilization practices and sediment control measures within 10 days of the discontinuance of soil disturbing activities or prior to the onset of precipitation, whichever is first to occur.

Throughout the winter season, active soil-disturbed areas of the project site shall be fully protected at the end of each day with soil stabilization practices and sediment control measures unless fair weather is predicted through the following work day. The weather forecast shall be monitored by the Contractor on a daily basis. The National Weather Service forecast shall be used, or an alternative weather forecast proposed by the Contractor may be used if approved by the Engineer. If precipitation is predicted prior to the end of the following work day, construction scheduling shall be modified, as required, and the Contractor shall deploy functioning control measures prior to the onset of the precipitation.

The Contractor shall implement, year-round and throughout the duration of the project, control measures included in the SWPPP for sediment tracking, wind erosion, non-storm water management and waste management and disposal.

The Engineer may order the suspension of construction operations which create water pollution if the Contractor fails to conform to the requirements of this section "Water Pollution Control" as determined by the Engineer.

MAINTENANCE.—To ensure the proper implementation and functioning of control measures, the Contractor shall regularly inspect and maintain the construction site for the control measures identified in the SWPPP. The Contractor shall identify corrective actions and time frames to address any damaged measures or reinitiate any measures that have been discontinued.

The construction site inspection checklist provided in the Handbook shall be used to ensure that the necessary measures are being properly implemented, and to ensure that the control measures are functioning adequately. The Contractor shall submit one copy of each site inspection record to the Engineer.

During the winter season, inspections of the construction site shall be conducted by the Contractor to identify deficient measures, as follows:

1. Prior to a forecast storm;
2. After any precipitation which causes runoff capable of carrying sediment from the construction site;
3. At 24 hour intervals during extended precipitation events; and
4. Routinely, at a minimum of once every 2 weeks.

If the Contractor or the Engineer identifies a deficiency in the deployment or functioning of an identified control measure, the deficiency shall be corrected by the Contractor immediately, or by a later date and time if requested by the Contractor and approved by the Engineer in writing, but not later than the onset of subsequent precipitation events. The correction of deficiencies shall be at no additional cost to the State.

PAYMENT.—The contract lump sum price paid for prepare storm water pollution prevention plan shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in developing, preparing, obtaining approval of, revising and amending the SWPPP as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Attention is directed to Sections 9-1.06, "Partial Payments," and 9-1.07, "Payment After Acceptance," of the Standard Specifications. Payments for prepare storm water pollution prevention plan will be made as follows:

1. After the SWPPP has been approved by the Engineer, 75 percent of the contract item price for prepare storm water pollution prevention plan will be included in the monthly partial payment estimate; and
2. After acceptance of the contract pursuant to Section 7-1.17, "Acceptance of Contract," the remaining 25 percent of the contract item price for prepare storm water pollution prevention plan will be made in accordance with Section 9-1.07.

The contract lump sum price paid for water pollution control shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in installing, constructing, maintaining, removing and disposing of control measures, except those shown on the project plans and for which there is a contract item of work, and excluding developing, preparing, obtaining approval of, revising and amending the SWPPP, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Changes in control measures required by an approved amendment to the SWPPP, except changes to those control measures shown on the project plans and for which there is a contract item of work, will be considered extra work, in accordance with Section 4-1.03D of the Standard Specifications and the following:

If the control measure is listed in the approved SWPPP schedule of values, an adjustment in compensation for the contract item for water pollution control will be made by applying the increase or decrease in quantities to the approved schedule of values. No adjustment of compensation will be made to the unit price listed for any item in the schedule of values due to any increase or decrease in the quantities, regardless of the reason for the increase or decrease. The provisions in Section 4-1.03B, "Increased or Decreased Quantities," shall not apply to items listed in the schedule of values.

If the control measure is not listed in the approved SWPPP schedule of values, payment will be made by force account.

Those control measures which are shown on the project plans and for which there is a contract item of work will be measured and paid for as that item of work.

The Engineer will retain an amount equal to 25 percent of the estimated value of the contract work performed during estimate periods in which the Contractor fails to conform to the requirements of this section "Water Pollution Control" as determined by the Engineer.

Retentions for failure to conform to the requirements of this section "Water Pollution Control" shall be in addition to the other retentions provided for in the contract. The amounts retained for failure of the Contractor to conform to the requirements of this section will be released for payment on the next monthly estimate for partial payment following the date that an approved SWPPP has been implemented and maintained, and water pollution is adequately controlled, as determined by the Engineer.

10-1.03 NON-STORM WATER DISCHARGES

Non-storm water discharges shall conform to the requirements in Section 7-1.01G, "Water Pollution" of the Standard Specifications and these special provisions.

Conformance with the requirements of this section shall in no way relieve the Contractor from the Contractor's responsibilities, as provided in Section 7-1.11, "Preservation of Property," and Section 7-1.12, "Responsibility for Damage," of the Standard Specifications.

Pile and Cofferdam Dewater.--Suspended solids shall be removed during the dewatering operation for piles and cofferdams, as specified in these special provisions. Attention is directed to "Piling" and "Column Casings (Bell Foundation Retrofit)" of these special provisions.

Suspended solids shall be removed to the extent that visible, floating products are not apparent within the discharge. Also, the discharge shall be of a visible purity such that turbidity and apparent color beyond the natural background level are not apparent within the receiving water body. The turbidity, measured in Nephelometric Turbidity Units (NTU), of the discharge shall not be greater than a 10 percent increase of the background turbidity. The point of effluent discharge shall not cause bottom sediments, aquatic vegetation, or surface soils to become dislodged or disturbed.

The Contractor shall graphically depict the dewatering process within the Storm Water Pollution Prevention Plan (SWPPP), as specified in "Water Pollution Control" of these special provisions. The graphic shall show both a sectional and plan view that details the removal techniques for suspended solids. The graphic shall define the flow path and placement of pipes, hoses, pumps, and other equipment used to convey the discharge. In addition, the Contractor shall provide a sketch that depicts the general position of the apparatus relative to the pile(s) or cofferdam(s) undergoing dewatering and the point of effluent discharge.

The Contractor shall describe the dewatering apparatus within the appropriate sections of the SWPPP. The description shall include, but not be limited to, an estimate of the discharge volume, flow rate, and frequency; location of discharge; and the inspection and monitoring procedures related to the discharge.

The Contractor shall conduct a daily inspection of the dewatering equipment, when in use, to ensure that all components are functional and routinely maintained to prevent leakage prior to removal of suspended solids. Any component of the apparatus that is found to be damaged or to affect the performance of the apparatus shall be either immediately repaired or replaced.

The Contractor shall visually monitor both the discharge and the receiving water body. The observations made during monitoring shall include the color, size of affected area, presence of suspended material, presence of water fowl or aquatic wildlife, wind direction and velocity, tidal condition, atmospheric condition, time, and date. In addition, the Contractor shall supplement the observations with photographs. The Contractor shall conduct monitoring, at a minimum, one hour prior to discharge, during the first ten minutes of initiating discharge, every four hours during discharge, and upon cessation of discharge. The observations shall be recorded daily in a tabular format known as the monitoring report provided within the Conceptual Storm Water Pollution Prevention Plan, as described within "Water Pollution Control" of these special provisions. The monitoring report, including photographs, shall be provided weekly to the Engineer, or as directed by the Engineer.

Observations which indicate that the discharge is of a visible purity such that turbidity is greater than 10 percent beyond the natural background turbidity measured in NTU, or that apparent color is beyond the natural background level are to be immediately reported to the Engineer. The discharge activity shall immediately cease, so that corrective actions are undertaken to repair, modify, or replace the equipment. The commencement of discharge activities shall be allowed upon approval by the Engineer.

Stockpile Dewater.-- The Contractor shall prevent the flow of water, including ground water, surface runoff and tidal flow from entering any temporary stockpiles on land.

The Contractor shall depict and describe within an amendment to the Storm Water Pollution Prevention Plan (SWPPP), as specified in "Water Pollution Control" of these special provisions, the methods and measures that will be used to dewater the temporary stockpiles, to seal the sides and bottom of the temporary stockpiles and to prevent the flow of water into the stockpiles. The time to be provided for the Engineer's review and approval of the amendment shall be 10 working days prior to beginning temporary stockpile operations. Operations producing water will not be permitted until the plan has been approved by the Engineer.

All water removal from temporary stockpiles shall be handled in accordance with National Pollutant Discharge Elimination System (NPDES) Permit CAS029998, issued by the San Francisco Bay Regional Water Quality Control Board. Copies of the permit and its amendments will be available for inspection and purchase at the Department of Transportation, 111 Grand Avenue, Oakland, California, (510) 286-5209. In addition, materials information entitled "San Mateo-Hayward Bridge Site Water" will be available for review at the same location. Please call the Toll Bridge Seismic Program Duty Senior, telephone number (510) 286-5549, to reserve a copy of the documents at least 24 hours in advance.

The Contractor is responsible for all work, records, reports, and costs involved in handling the water in accordance with the NPDES permit. The Contractor shall supply all analytical data, dewatering volume records, and written requests for discharge to the Engineer for approval prior to discharging any water. The Engineer shall have up to 7 calendar days for review and approval of discharge. Water that does not meet discharge permit requirements shall not be discharged into storm drainage systems, ground water, creeks, streams, lakes, or other water bodies. The Contractor is responsible for either treating such water to meet the permit requirements for discharge, or for hauling such water off site to an appropriately licensed liquid disposal facility. In addition, the contractor may elect to obtain an agreement with the local sanitary sewer district for discharge into their system. The costs of associated with any pre-treatment required by the sanitary sewer district shall be borne by the Contractor. Penalties assessed against the State for permit non-compliance by the Contractor will be borne by the Contractor. The Department will permanently reduce the amount of any contract moneys due to the contractor, or that may become due, by the amount of such penalties.

However, nothing in this section, "Non-Storm Water Discharges," will be construed as relieving the Contractor of full responsibility of complying with Section 7-1.16 "Contractor's Responsibility for the Work and Materials," of the Standard Specifications.

Concrete Wastes.--Attention is directed to "Remove Unsound Concrete (4" Depth);" "Remove Concrete Deck Surface;" "Drill and Bond Dowel (Epoxy Cartridge);" "Drill and Bond Dowels;" "Core Concrete;" "Rapid Setting Concrete Patches;" "Polyester Concrete Overlay;" and "Column Casings (Bell Foundation Retrofit)"of these special provisions. The control and disposal of water, abrasives, and residues associated with concrete wastes shall be described within the SWPPP, as specified in "Water Pollution Control" of these special provisions. The SWPPP shall, at a minimum, depict and describe the procedural and structural methods of detaining, collecting, and disposing of all concrete wastes. Sufficient redundancy shall be incorporated into the procedural and structural methods such that concrete wastes are not conveyed into or become present in drainage systems, San Francisco Bay, or other water bodies.

Measurement and Payment.-- Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work affected by this section and no additional compensation will be allowed therefor.

10-1.04 ELECTRONIC MOBILE DAILY DIARY COMPUTER SYSTEM

The Contractor shall provide for the State's exclusive possession and use a complete electronic mobile daily diary computer system, to allow State personnel to record observation (diary) data in the field using Personal Digital Assistants (PDAs), and in the office using desktop workstation(s). Recorded data will be uploaded to a database maintained on an Oracle server. Diary information in the database shall be capable of being edited and printed in the form of an Engineer's Daily Report from desktop workstations connected to the database via a local area network. The system shall also provide other reports required by the Engineer, as well as user friendly and rapid retrieval of daily reports and other information from the database for research purposes.

The Engineer may use the furnished computer hardware, software, and instruction manual for any purposes related to the subject project. Before delivery and set up of the computer system the Contractor shall submit to the Engineer for approval a detailed list of all computer hardware and software the Contractor proposes to furnish. All computer hardware and software furnished shall remain the property of the Contractor and shall be removed by the Contractor upon acceptance of the contract when no claims are pending and after the final estimate has been submitted to the Contractor.

The electronic mobile daily diary computer system furnished shall meet the requirements described below for function, data, hardware, and support.

FUNCTIONAL REQUIREMENTS.--The Contractor shall provide, not later than 11 days after contract award, a computer system that complies with the following minimum functional specifications:

DATA COLLECTION SUBSYSTEM.--

1. Accept input of observation data.

General Data.--Allow input of data that applies to all observation data sets:

- Inspector ID: agency-specific code; allow up to 10 alphanumeric characters.
- Inspector password: general text field; allow up to 10 characters.
- Inspector name: general text field; allow up to 30 characters.
- Inspector title: general text field; allow up to 30 characters.

REVISED PER ADDENDUM NO. 1 DATED NOVEMBER 7, 1997

Daily Contract Observation Data.--Collect one or more contract observation data sets per contract per inspector per day:

- Observation date: month, day & year.
- Contract ID: agency-specific code; allow up to 15 alphanumeric characters.
- Uniqueness guarantor: time and time of creation of the data set.
- Weather condition, am and pm: agency-specific code of up to 10 alphanumeric characters.
- Temperature, high and low: signed numeric value of up to 3 digits (degrees Fahrenheit or Celsius).
- Humidity, high and low: percentage value (0 to 100%).
- Start and stop time for inspector shift (24-hour clock; values at the half hour).
- Start and stop time for jobsite shift (24-hour clock; values at the half hour).
- Level of inspection: values are “continuous”, “intermittent” and “no inspection”.
- Inspector signature: digital image of signature.

Laborer Observation Data.--Collect multiple labor observations per observation data set:

- Contract item or Contract Change Order (CCO): sequential number; allow up to 6 digits.
- Contractor ID: agency-specific code; allow up to 10 alphanumeric characters.
- Critical Path Method network (CPM) activity code: agency-specific code; allow up to 10 alphanumeric characters.
- Structure/Line: agency-specific code; allow up to 10 alphanumeric characters.
- Location/Station: general text field; allow up to 60 characters.
- Laborer name: last, first, & middle initial.
- Labor classification: agency-specific code; allow up to 10 alphanumeric characters.
- Trainee status: Boolean value.
- Hours: numeric value (0 to 24; up to 2 places behind the decimal point).
- Hours type flag: flag value to indicate regular vs. overtime hours.
- Force account flag: Boolean value (CCO observations only).

- Contracts.
- Contract items.
- CCOs.
- CPM activity codes.
- Inspector assignments to contracts.
- Contractor assignments to contract items.

- Provide the ability to import lists of laborers & equipment from contractors into the database.
- Maintain integrity of database constraints during edit and import processes.

8. Provide the capability of generating diagnostic reports to identify the following:

- Duplication of labor, equipment, and materials entries on all diaries for any given date.
- Notification of labor and equipment entries as "new".

HARDWARE REQUIREMENTS.--The Contractor shall furnish all hardware required for the electronic mobile daily diary computer system, including PDAs, desktop systems, servers, printers, and miscellaneous hardware. The minimum requirements for the various classes of hardware are as follows:

- PDA: Apple Newton 2000 MessagePad, or 100% compatible with 5 MB RAM card, 8MB ROM charging station, carrying case, and Newton OS 2.0.
- Desktop: Complete computer system, including keyboard, mouse and monitor, using the latest available Intel Pentium processor, or equivalent with minimum of sixty-four (64) megabytes of random access memory (RAM), three-gigabyte minimum hard disk drive, 1.44 megabyte 3 l/2 inch floppy disk drive, 16x speed minimum CD-ROM drive, 17-inch minimum monitor capable of at least 1,024 x 768 pixels, and Windows NT user (client) license.
- Printer: HP LaserJet 5-series or 100% compatible.
- Network: Ethernet network with twisted-pair wiring and passive hub.

The Contractor shall supply hardware for the system in the following quantities:

- 10 – PDA and accessories as described above.
- 02– desktop workstations as described above.
- 01– printers as described above.
- as need it – misc. network hardware and cables as described above.
- 03 – PDA keyboards.
- 02 – PDA print packs.
- 10– Oracle Workgroup Server licenses.
- 30 - WriteRight screen enhancers
- 20 - Replacement styluses for PDAs

SUPPORT REQUIREMENTS.--The Contractor shall furnish all support required for the electronic mobile daily diary computer system. The minimum requirements for support are as follows:

- Installation: initial on-site installation and verification of hardware, software and networks.
- Training: initial on-site training for one half day for up to (35) Caltrans inspectors and database/system administrators.
- Telephone and e-mail support: the Caltrans system administrator may submit operational questions by telephone during normal business hours or by electronic mail at any time. Emergencies will receive immediate attention, and other questions will be answered within one business day.
- Software updates: occasional maintenance updates to the application software, as available.
- On-site visits: scheduled visits to the installation site to check system operation, provide "refresher" or advanced training as applicable, install software updates, as agreed with the Engineer.

The Contractor shall furnish support required for the Electronic Mobile Daily Diary Computer System for a period of 24 months following award of contract.

PAYMENT.--Mobile Daily Diary Computer System will be paid at a lump sum price.

The contract lump sum price paid for the electronic mobile daily diary computer system shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in supplying the mobile daily diary computer system, complete and in place, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment for providing and implementing this mobile daily diary computer system will be made on a lump sum basis, in 4 milestones as follows:

Milestone 1: This milestone will be satisfied upon delivery and installation of hardware and database software as described under "Hardware Requirements", above. Payment for milestone 1 will equal 45% of total item lump sum cost.

Milestone 2: This milestone will be satisfied upon acceptance of the system by the Engineer as functionally complete per these specifications. Payment for milestone 2 will equal 25% of total item lump sum cost.

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21 (F)	193003	STRUCTURE BACKFILL (BRIDGE)	CY	630		
22	390103	ASPHALT CONCRETE (TYPE B)	TON	40		
23	394002	PLACE ASPHALT CONCRETE (MISCELLANEOUS AREA)	SQYD	340		
24 (S)	490605	36" CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	810		
25 (S)	490616	84" CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	320		
26 (S)	500001	PRESTRESSING CAST-IN-PLACE CONCRETE	LS	LUMP SUM	LUMP SUM	
27 (S)	500060	TIEDOWN ANCHOR	EA	19		
28 (F)	510051	STRUCTURAL CONCRETE, BRIDGE FOOTING	CY	1,000		
29 (F)	510053	STRUCTURAL CONCRETE, BRIDGE	CY	1,300		
30 (F)	510080	STRUCTURAL CONCRETE, APPROACH SLAB	CY	90		
31	511106	DRILL AND BOND DOWEL	LF	11,440		
32	511109	DRILL AND BOND DOWEL (EPOXY CARTRIDGE)	EA	740		
33 (S)	046985	CORE CONCRETE (2") AND PRESSURE GROUT	LF	525		
34 (S)	046986	CORE CONCRETE (4") AND PRESSURE GROUT	LF	32		
35 (S)	515064	CORE CONCRETE (5")	LF	200		
36 (S)	046987	CORE CONCRETE (1 1/2") AND PRESSURE GROUT	LF	1,100		
37 (S)	046988	CORE CONCRETE (1 3/4") AND PRESSURE GROUT	LF	1,700		
38 (S)	515163	CORE CONCRETE (2 1/2")	LF	200		
39 (S)	046989	CORE CONCRETE (2 1/2") AND PRESSURE GROUT	LF	88		
40 (S)	046329	SEISMIC ISOLATOR BEARING (TYPE 1)	EA	44		

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41 (S)	046330	SEISMIC ISOLATOR BEARING (TYPE 2)	EA	24		
42 (S)	046331	SEISMIC ISOLATOR BEARING (TYPE 3)	EA	6		
43 (S)	046332	EXPANSION JOINT ASSEMBLY	LF	147		
44 (S-F)	520102	BAR REINFORCING STEEL (BRIDGE)	LB	656,000		
45 (F)	550203	FURNISH STRUCTURAL STEEL (BRIDGE)	LB	325,000		
46 (F)	550204	ERECT STRUCTURAL STEEL (BRIDGE)	LB	325,000		
47	046333	MODIFY TIMBER CATWALK	LS	LUMP SUM	LUMP SUM	
48 (S)	590115	CLEAN AND PAINT STRUCTURAL STEEL	LS	LUMP SUM	LUMP SUM	
49 (S)	590135	SPOT BLAST CLEAN AND PAINT UNDERCOAT	SQFT	11,300		
50 (S)	590301	WORK AREA MONITORING	LS	LUMP SUM	LUMP SUM	
51 (F)	750498	MISCELLANEOUS METAL (RESTRAINER - CABLE TYPE)	LB	17,600		
52 (F)	750501	MISCELLANEOUS METAL (BRIDGE)	LB	22,800		
53	839481	CONCRETE BARRIER (TYPE 50)	LF	460		
54	839484	CONCRETE BARRIER (TYPE 50A MODIFIED)	LF	640		
55	839510	HEADLIGHT GLARE SCREEN	LF	1,100		
56	840656	PAINT TRAFFIC STRIPE (2-COAT)	LF	7,920		
57	840666	PAINT PAVEMENT MARKING (2-COAT)	SQFT	170		
58	850101	PAVEMENT MARKER (NON-REFLECTIVE)	EA	270		
59	850102	PAVEMENT MARKER (REFLECTIVE)	EA	150		
60	010222	MAINTAIN EXISTING TRAFFIC MONITORING STATIONS	LS	LUMP SUM	LUMP SUM	

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	010223	RELOCATE 8-INCH CITY OF BENICIA WATER MAIN	LS	LUMP SUM	LUMP SUM	
62	011835	TIME RELATED OVERHEAD	WDAY	315		
63	010953	ELECTRONIC MOBILE DAILY DIARY COMPUTER SYSTEM	LS	LUMP SUM	LUMP SUM	
64	010954	ELECTRONIC MOBILE DAILY DIARY SYSTEM DATA DELIVERY	LS	LUMP SUM	LUMP SUM	
65	070010	PROGRESS SCHEDULE (CRITICAL PATH)	LS	LUMP SUM	LUMP SUM	
66	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

TOTAL BID: _____